

**GEOPROBE INVESTIGATION  
FORMER JERRY'S SERVICE (BRRTS 03-41-534110)  
2477 NORTH HOLTON STREET  
MILWAUKEE, WISCONSIN 53212**

PREPARED FOR:

RILEY NEUMANN  
WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
2300 NORTH DOCTOR MARTIN LUTHER KING DRIVE  
MILWAUKEE, WISCONSIN 53212

SUJIN LEE  
P.O. BOX 511834  
MILWAUKEE, WISCONSIN 53203

SEPTEMBER 2017

**SEYMOUR ENVIRONMENTAL SERVICES, INC.**

P.O. Box 398, 2531 Dyreson Road, McFarland, Wisconsin 53558

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	SITE AND CONSULTANT INFORMATION.....	1
1.2	DESCRIPTION OF SURROUNDING AREA.....	1
1.3	SITE OWNERSHIP AND USAGE .....	2
1.4	REGIONAL INFORMATION .....	2
1.5	SUMMARY PREVIOUS ENVIRONMENTAL ACTIVITIES .....	2
<b>2.0</b>	<b>SITE INVESTIGATION ACTIVITIES .....</b>	<b>2</b>
<b>3.0</b>	<b>DISCUSSION OF RESULTS .....</b>	<b>3</b>
<b>4.0</b>	<b>RECOMMENDATIONS.....</b>	<b>3</b>

### FIGURES

1	Site Location
2	Site Layout
3	Tank Closure Sampling Locations
4	Investigation Sampling Locations
5	Identified Soil Contamination

### TABLES

1	Summary of Geoprobe Soil Analytical Data
2	Summary of Groundwater Analytical Data
3	Summary of Petroleum Compounds in Soil

### APPENDIX

A	Boring Logs
B	Laboratory Report

## 1.0 INTRODUCTION

This describes the contamination assessment activities at the former Jerry's Service located at 2477 North Holton Street in Milwaukee, Wisconsin. Seymour Environmental Services, Inc. (Seymour) is conducting this investigation in response to petroleum-related compounds identified during a tank removal assessment performed in early November 2011. The soil contamination was detected during removal of three underground storage tanks. The tanks had been out of use for several years. No other tanks are known to be present at the site.

Seymour and On-site Environmental Services, Inc. conducted the Geoprobe™ investigation on June 22, 2017.

### 1.1 Site and Consultant Information

Site Location: Former Jerry's Service  
2477 North Holton Avenue  
Milwaukee, Wisconsin 53203  
Parcel #: 321-1334-1  
SW ¼ of the SW ¼ of Section 16, Township 7 North, Range 22 East  
WTM: X: 690537 Y: 290020

Owner/  
Responsible Party: KP Ventures  
P.O. Box 511834  
Milwaukee, Wisconsin 53203  
Contact: Ms. Sujin Lee (414) 745-8790

Consultant: Seymour Environmental Services, Inc.  
2531 Dyreson Road  
McFarland, Wisconsin 53558  
Contact: Robyn Seymour (608) 838-9120

Geoprobe/Driller: On-site Environmental Services, Inc  
P.O. Box 280  
Sun Prairie, Wisconsin 53590  
Contact: Kim Kapugi (608) 837-8992

Laboratory: Pace Analytical  
1241 Bellevue Street, Suite 9  
Green Bay, Wisconsin 54302  
Contact: Dan Milewsky (920) 469-2436

### 1.2 Description of Surrounding Area

The site is located in the near north side of the City of Milwaukee (Figure 1). The property is bounded to the north by E. Wright Street and the east by N. Holton Avenue. The subject parcel (PN: 321-1334-1) is 4,000 square feet. A single building approximately 1,300 square feet in size is present in the southwest portion of the property (Figure 2). The remainder of the property is covered by pavement with the exception of a thin strip of grass along the southern margin of the property ~8 feet wide. The legal description is J L Pierce's subdivision of lots 47-55 included in the SW ¼ Section 16, Township 7, Range 22 East V2P125 Block 42 E 8-0' Lot 1.

The area surrounding the site is highly developed. Property uses include a mix of residential and commercial properties.

### **1.3 Site Ownership and Usage**

The property has been owned by KP Ventures since 2004. The site is currently occupied by Waheed's Tire Center. Jerry's Tire was a previous tenant.

### **1.4 Regional Information**

The parcel is located at an elevation of ~698 feet msl. The surface topography slopes slightly toward the east. The Milwaukee River is located approximately 3,000 feet east of the site. Local surface water drainage is controlled primarily by the Milwaukee storm sewer system.

Native surficial materials at the site are glacial till deposits. These materials are comprised primarily of fine-grained sediments with thin, discontinuous sandy seams. The glacially-derived sediments extend to a depth of approximately 90 feet where bedrock is encountered. The bedrock at the site is Devonian-aged carbonate (Milwaukee Formation). This bedrock is typically a silty dolomite which contains numerous fossils.

Groundwater in the area is present within the glacial till deposits at a depth of about 15 feet. Flow in the shallow groundwater generally is reported to be southerly in the area. However, local variation in the groundwater flow is common.

### **1.5 Summary Previous Environmental Activities**

In November 2011 the fuel storage tank system was removed. The system consisted of three underground storage tanks, two 1,000 gallon leaded gasoline tanks and one 500 gallon waste oil tank, and associated gasoline dispensers. Soil samples were collected during the tank removal (Figure 3). Laboratory analyses showed that all of the soil samples contained at least one compound in excess of the Wisconsin Department of Natural Resources (DNR) soil standards. The sampling locations and identified soil contamination are shown on Figure 3.

## **2.0 SITE INVESTIGATION ACTIVITIES**

Seymour and On-site met at the site on June 22, 2017 to conduct soil and groundwater sampling. We installed a total of nine Geoprobe™ borings. Soil samples were collected continuously from each of the borings. The soil samples were screened for organic vapors in the field using a photo ionization detector equipped with a 10.6 eV lamp. One soil sample was selected at each location for laboratory analysis with the exception of boring B-7. The boring logs are included as Appendix A. The boring locations are shown on Figure 4.

We started our sampling near the former dispensers. The borings around the dispensers, B-1 through B-3, were installed to 5 feet to sample for direct contact analysis. No obvious contamination was present in boring B-1 or B-2 but odor and staining were present in B-3. One sample was collected from each of these borings for laboratory analysis. These samples were analyzed for petroleum volatile organic compounds (PVOCs) and polynuclear aromatic compounds (PAHs).

Borings B-4 through B-9 were installed around the former tank locations. Boring B-4 was extended to 10 feet, it appeared that water was present around 8 feet in that boring. Boring B-5 was extended to 12 feet when we were not able to collect a water sample at 10 feet. Boring B-6 was terminated at 5 feet since obvious contamination was detected. Boring B-7 was installed as far to the east as we could get from the former waste oil tank, since no contamination was detected in the shallow soil we extended the boring to 10 feet and submitted samples from 4 and 7 feet to confirm that the contamination did not impact this area. Boring B-8 was installed just south of the former waste oil tank and a groundwater sample was

collected. Soil samples selected from these boring were analyzed for PVOCs+naph. No obvious contamination was present in B-7 so B-9 was installed closer to the tank. Since obvious contamination was present at 4 feet the sample was analyzed for PVOCs and PAHs.

The two groundwater samples collected from borings B-5 and B-8 were analyzed for volatile organic compounds (VOCs) and PAHs. The laboratory report is included in Appendix B.

### **3.0 DISCUSSION OF RESULTS**

Soil contamination was present above the DNR standards in samples from 6 of the 9 borings. The heaviest contamination appears to be present around the two tank beds, the dispensers did not appear to have contamination in two of the borings, B-1 and B-2. Boring B-3 did have several groundwater residual contaminant levels (RCL) exceedances but they may have been associated with the piping and/or the tanks. No boring was installed south of the canopy because there was not enough overhead clearance. The soil analytical results are summarized on Table 1.

The highest levels of contamination were present near the former waste oil tank in the sample from boring B-9 collected at 4 feet. This sample contained compounds above the industrial direct contact standards as well as the groundwater pathway allowable RCLs. Boring B-8, also located adjacent to the former waste oil tank also has several compounds present above the groundwater RCLs and benzene was present above the residential direct contact standard. It appears that a small volume of contaminated soil is present around the former waste oil tank. No contaminants were present above the standards from either the 4 or 7 foot sample collected from boring B-7, indicating the contamination is localized around the tank. Groundwater at that location (B-8) only has an enforcement standard (ES) exceedance for benzene. The groundwater results are summarized on Table 2.

Borings B-4, B-5 and B-6 surrounded the two former gasoline tanks. All of the samples collected from these borings had groundwater protection RCL exceedances. A groundwater sample collected from boring B-5 had benzene, ethylbenzene, total trimethylbenzenes and naphthalene present above the ES. However, the levels were lower than would have been expected given that the soil results were well above standards.

### **4.0 RECOMMENDATIONS**

The soil contamination at the site is limited to the east portion of the site, where the tanks were located. The groundwater contamination will require further investigation.

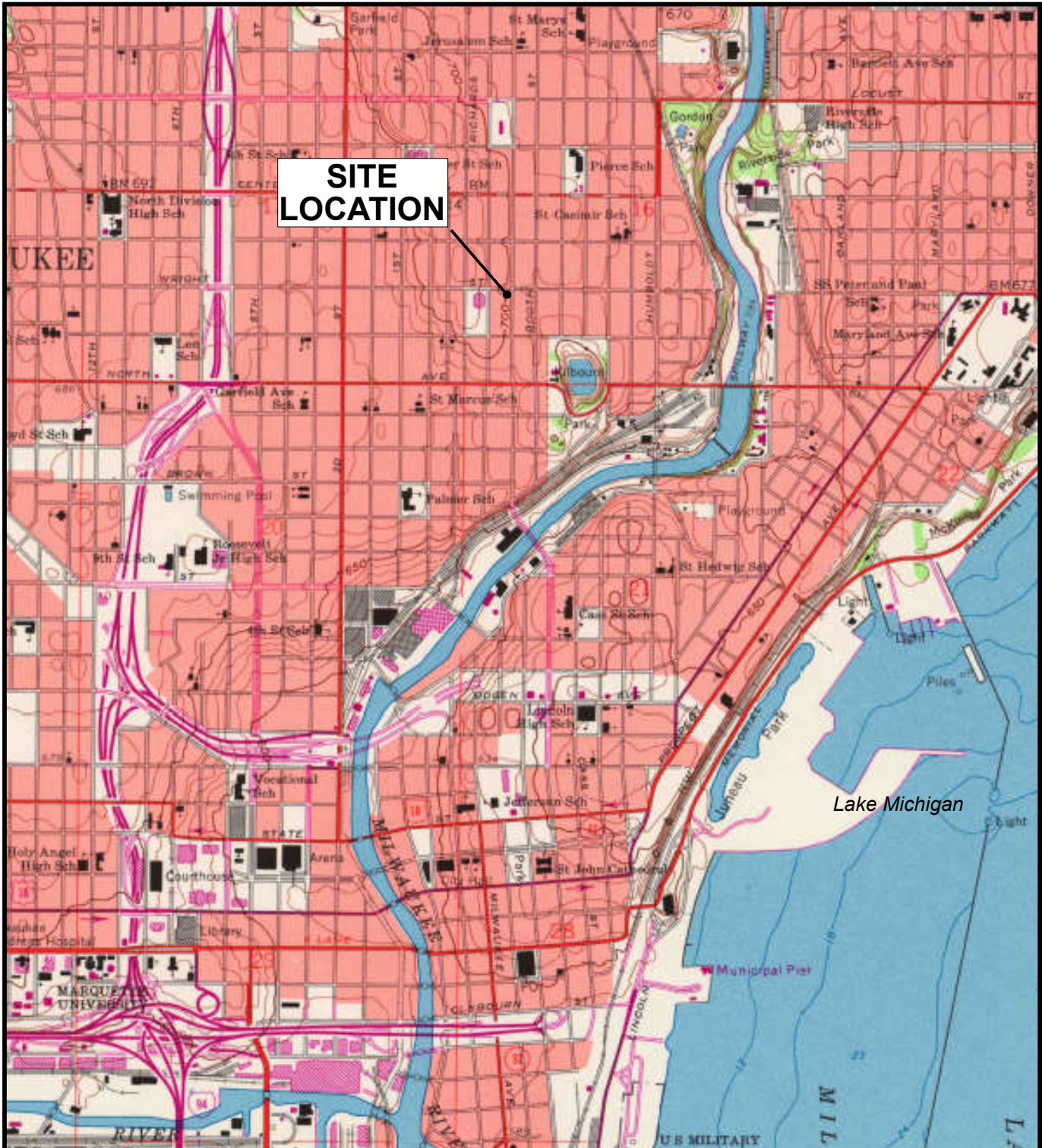
Once you have had a chance to review this data we would like to discuss our next phase with you. Questions should be directed to Robyn Seymour or Mark Fryman at (608) 838-9120.

Sincerely,  
**Seymour Environmental Services, Inc.**



Robyn Seymour

## **FIGURES**



1 INCH = 2000 FEET  
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\KPVentures  
Fig1-Location.cdr  
DATE: 10/17/2010  
PREPARED: MDF APPROVED:  
SOURCE:  
Milwaukee, WI 7.5' Quadrangle, 1958

**SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.**

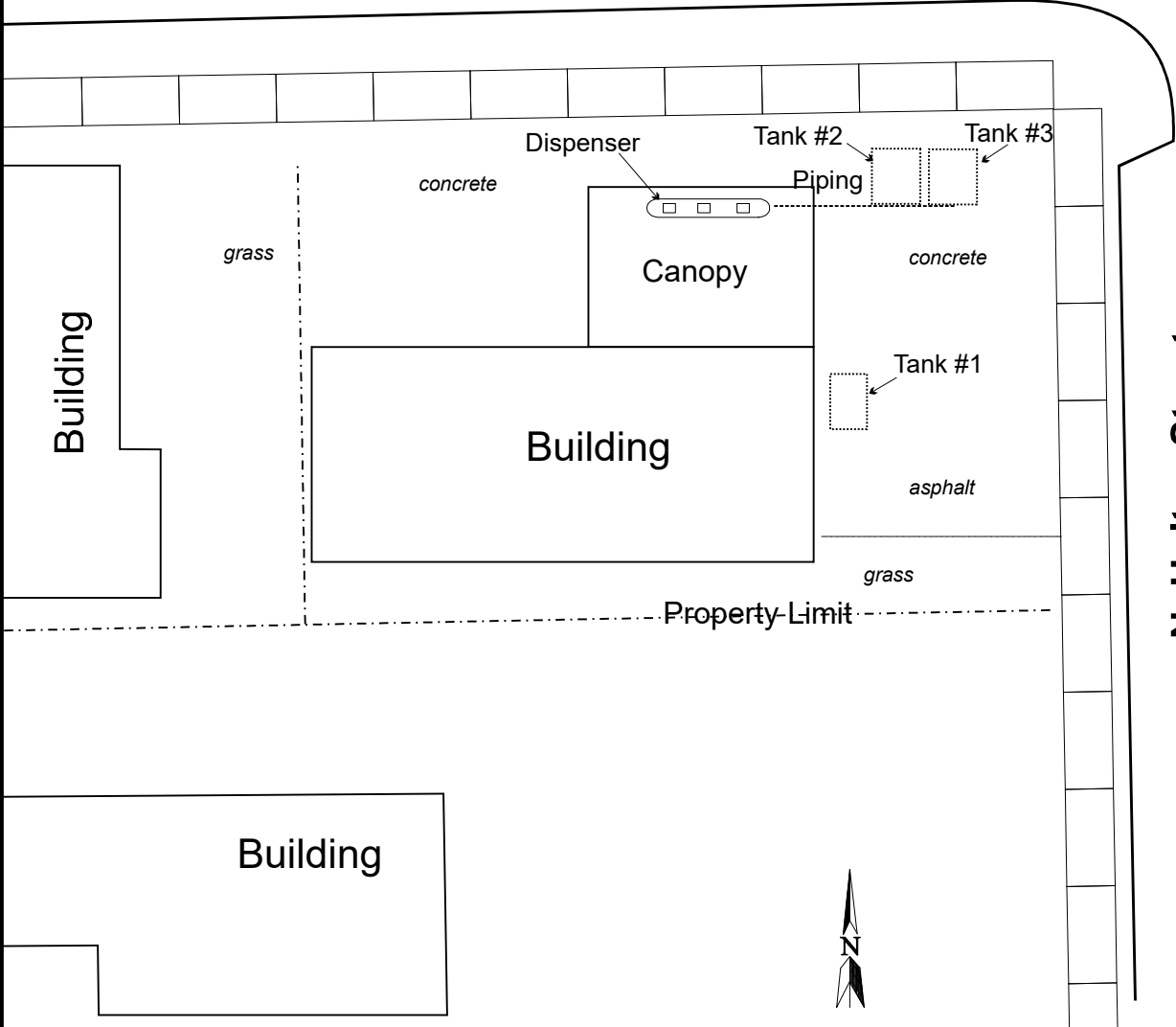
**SITE LOCATION**  
Former Jerry's Service  
2477 N. Holton Street  
Milwaukee, Wisconsin

**FIGURE**

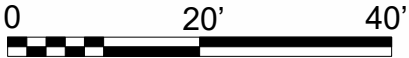
**1**

Tank #1	500 Gal	Waste Oil
Tank #2	1,000 Gal	Gasoline
Tank #3	1,000 Gal	Gasoline

**E. Wright Street**



**N. Holton Street**



1 INCH = 20 FEET  
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\SKP Ventures  
Fig2-Layout.cdr  
DATE: 10/17/2016  
PREPARED: MDF APPROVED:  
SOURCE:  
Milwaukee County Mapping  
FIELD MEASUREMENTS

**SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.**

**SITE LAYOUT**  
Former Jerry's Service  
2477 N. Holton Street  
Milwaukee, Wisconsin

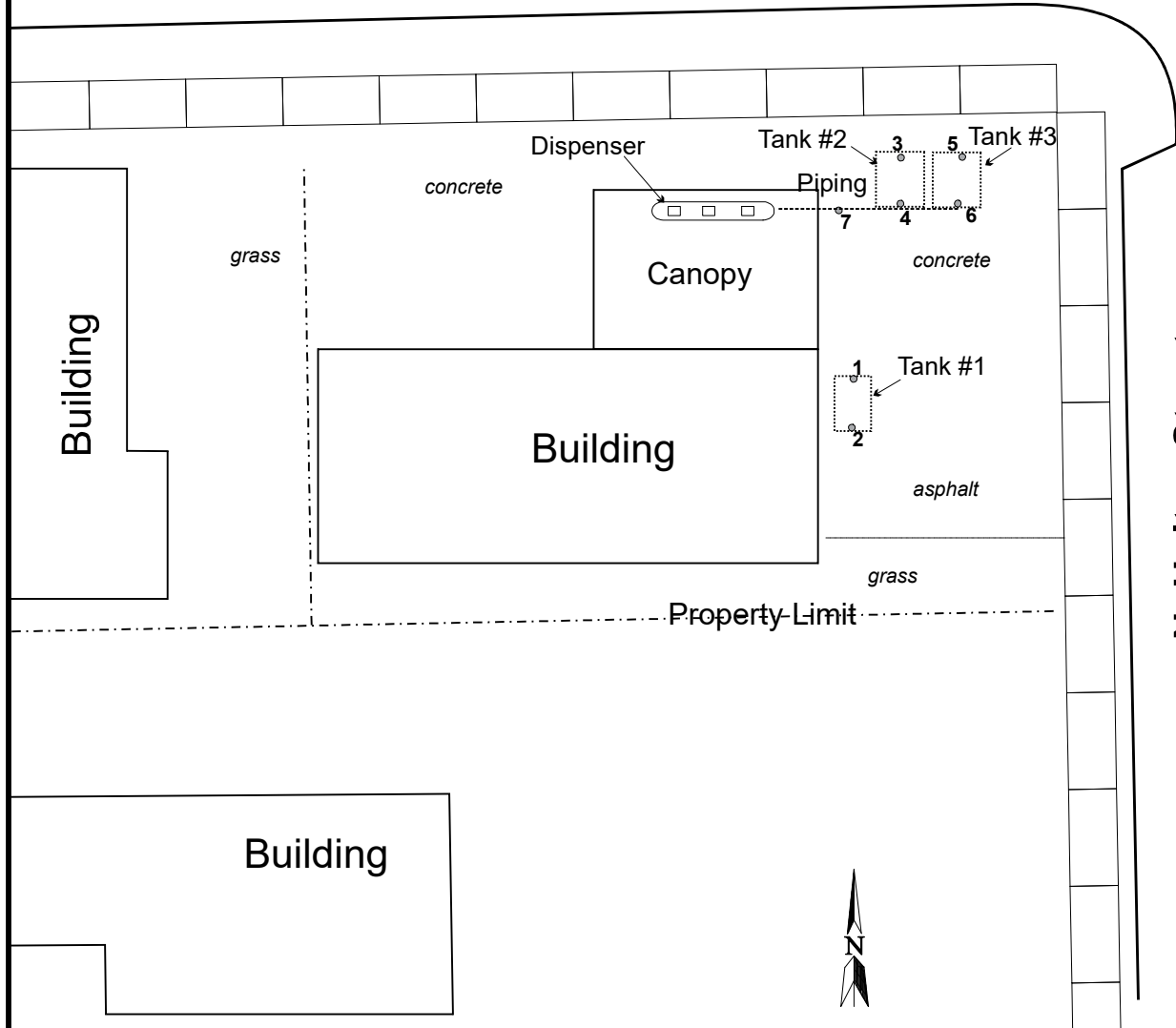
**FIGURE**

**2**



Tank #1	500 Gal	Waste Oil
Tank #2	1,000 Gal	Gasoline
Tank #3	1,000 Gal	Gasoline

**E. Wright Street**



**LEGEND**

1 ○ - Tank Closure Sample

0 20' 40'

1 INCH = 20 FEET  
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\SKPVentures  
Fig3-TankClos.cdr

DATE: 10/17/2016

PREPARED: MDF APPROVED:

SOURCE:  
Milwaukee County Mapping  
FIELD MEASUREMENTS

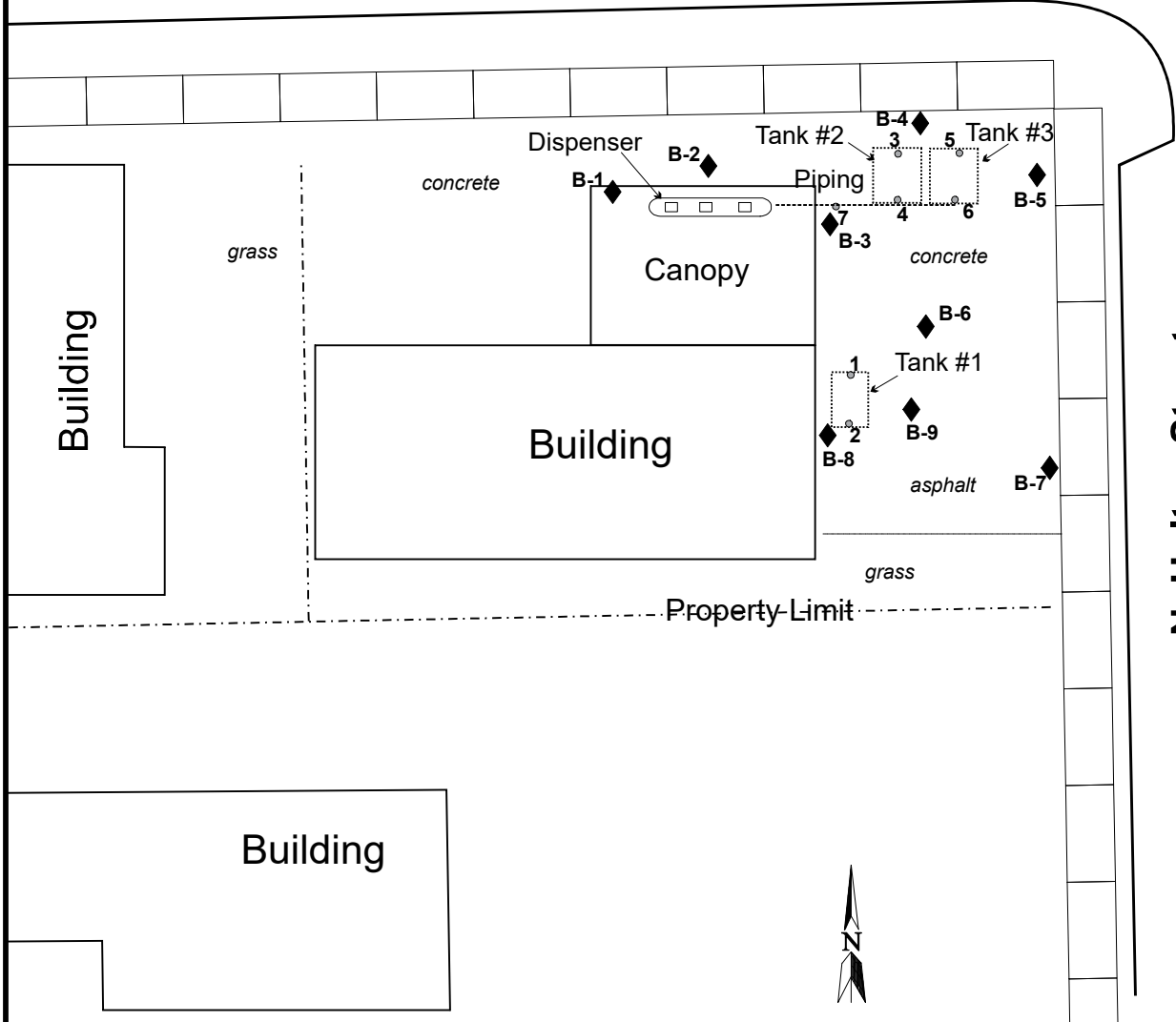
**SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.**

**TANK CLOSURE SAMPLE LOCATIONS**  
Former Jerry's Service  
2477 N. Holton Street  
Milwaukee, Wisconsin

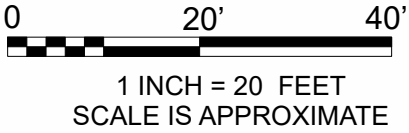
**FIGURE  
3**

Tank #1	500 Gal	Waste Oil
Tank #2	1,000 Gal	Gasoline
Tank #3	1,000 Gal	Gasoline

**E. Wright Street**



<b>LEGEND</b>	
1 ○	- Tank Closure Sample
B-7 ◆	- Geoprobe (July 2017)



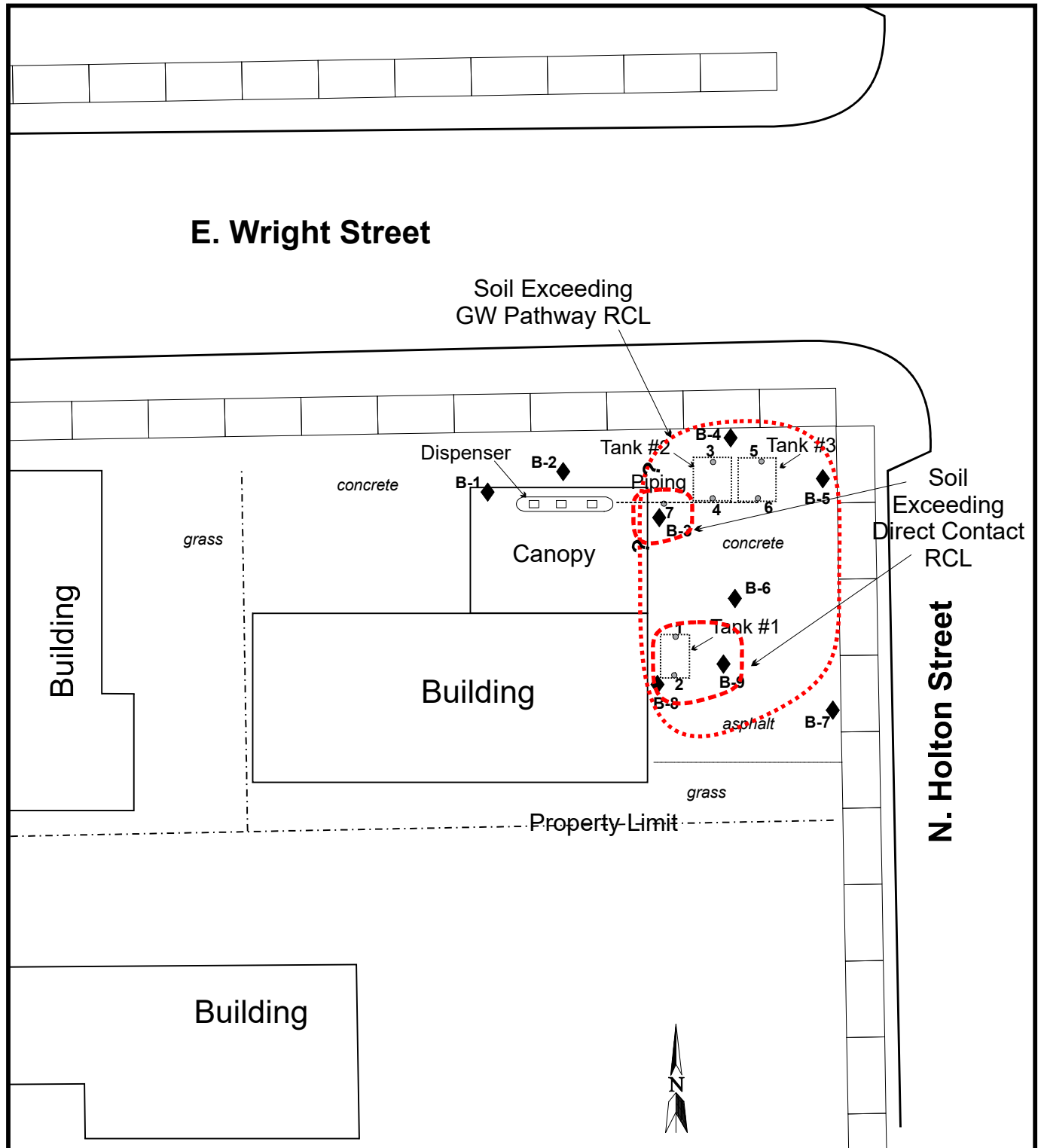
FILE/PATH: D:\PROJECTS\SKPVentures  
Fig4-SamplingLocs.cdr  
DATE: 7/17/2017  
PREPARED: MDF APPROVED:  
SOURCE:  
Milwaukee County Mapping  
FIELD MEASUREMENTS

**SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.**

**INVESTIGATION SAMPLING LOCATIONS**  
Former Jerry's Service  
2477 N. Holton Street  
Milwaukee, Wisconsin

**F I G U R E**

**4**



**LEGEND**

1 ○ - Tank Closure Sample

B-7 ◆ - Geoprobe (July 2017)

0 20' 40'

1 INCH = 20 FEET  
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\SKP Ventures  
Fig5-SoilCont.cdr

DATE: 07/17/2017

PREPARED: MDF APPROVED:

SOURCE:  
Milwaukee County Mapping  
FIELD MEASUREMENTS

**SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.**

**IDENTIFIED SOIL CONTAMINATION**  
Former Jerry's Service  
2477 N. Holton Street  
Milwaukee, Wisconsin

**FIGURE  
5**

## **TABLES**

TABLE 1  
SUMMARY OF GEOPROBE SOIL ANALYTICAL DATA (June 22, 2017)  
Former Jerry's Service - 2477 North Holton Street - Milwaukee, WI

SAMPLE	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-7	B-8	B-9	Groundwater Pathway RCLs	Non-Industrial Direct Contact RCLs
Depth (ft)	2	3	3.5	7	7	5	4	7	7	4		
GRO	<3.0	<2.8	na	na	na	na	na	na	na	na	ns	ns
PVOCs												
Benzene	<25.0	<25.0	<500	<b>6030</b>	<b>89.2</b>	<b>540(J)</b>	<25.0	<25.0	<b>5450</b>	<b><u>11600</u></b>	5.1	1600
1,2 Dichloroethane	na	na	<500	na	na	na	<25.0	na	na	<625	2.8	652
Ethylbenzene	<25.0	<25.0	<b>1930</b>	<b>5380</b>	<b>2620</b>	<b>19600</b>	<25.0	<25.0	<b>1080</b>	<b><u>80700</u></b>	1570	8020
Methyl-tert-butyl ether	<25.0	<25.0	<500	<b>51.6(J)</b>	<b>44.9(J)</b>	<250	<25.0	<25.0	<b>47.0(J)</b>	<625	27	63,800
Toluene	30.7(J)	<25.0	<500	<b>1250</b>	95.9	971	<25.0	<25.0	<b>1510</b>	<b>251000</b>	1107	818,000
1,3,5 Trimethylbenzene	<25.0	<25.0	37800	671	503	17500	<25.0	<25.0	105	43800	ns	182,000
1,2,4 Trimethylbenzene	<25.0	<25.0	153000	2870	8380	63500	<25.0	<25.0	402	151000	ns	219,000
Total Trimethylbenzenes	<50.0	<50.0	<b>190800</b>	<b>3541</b>	<b>8883</b>	<b>81000</b>	<50.0	<50.0	<b>507</b>	<b>194800</b>	1379	ns
Xylenes, -m, -p	<50.0	<50.0	8240	16100	4010	23100	<50.0	<50.0	3070	288000	ns	ns
Xylene, -o	<25.0	<25.0	1160	5890	119	3150	<25.0	<25.0	1110	105000	ns	ns
Total Xylenes	<75.0	<75.0	<b>9400</b>	<b>21990</b>	<b>4129</b>	<b>26250</b>	<75.0	<75.0	<b>4180</b>	<b><u>393000</u></b>	3940	260,000
Naphthalene	na	na	<b><u>9830</u></b>	<b>1250</b>	<b>3200</b>	<b>9300</b>	<40.0	65.8	103	<b><u>25000</u></b>	658.7	5520
n-Butylbenzene	na	na	<500	na	na	na	<25.0	na	na	14400	ns	108,000
s-Butylbenzene	na	na	933	na	na	na	<25.0	na	na	2380	ns	
Chloroform	na	na	<929	na	na	na	<46.4	na	na	<b>1880</b>	3.3	454
Isopropylbenzene	na	na	<500	na	na	na	<25.0	na	na	5780	ns	
p-Isopropyltoluene	na	na	1880	na	na	na	<25.0	na	na	1380	ns	
n-Propylbenzene	na	na	1910	na	na	na	<25.0	na	na	28900	ns	264,000
PAHs												
Acenaphthene	<4.7	<4.4	<226	na	na	na	na	na	na	<4.5	ns	3,590,000
Acenaphthylene	<4.0	<3.7	<192	na	na	na	na	na	na	<3.8	ns	ns
Anthracene	<7.0	<6.5	<333	na	na	na	na	na	na	<6.6	196,744	17,900,000
Benzo(a)anthracene*	<3.9	<3.6	<185	na	na	na	na	na	na	<3.7	ns	1,140
Benzo(a)pyrene*	<3.1	<2.9	<146	na	na	na	na	na	na	<2.9	470	115
Benzo(b)fluoranthene*	<3.4	<3.2	<165	na	na	na	na	na	na	<3.3	480	1,150
Benzo(g,h,i)perylene	<2.5	<2.3	<118	na	na	na	na	na	na	<2.4	ns	ns
Benzo(k)fluoranthene*	<3.1	<2.8	<146	na	na	na	na	na	na	<2.9	ns	11,500
Dibenzo(a,h)anthracene*	<2.7	<2.5	<130	na	na	na	na	na	na	<2.6	ns	115
Chrysene*	<4.1	<3.8	<197	na	na	na	na	na	na	<3.9	145.1	115,000
Fluoranthene	<6.3	<5.9	<304	na	na	na	na	na	na	<6.1	88,818	2,390,000
Fluorene	<5.0	<4.7	<241	na	na	na	na	na	na	<4.8	14,815	2,390,000
Indeno(1,2,3-cd)pyrene*	<2.7	<2.5	<128	na	na	na	na	na	na	<2.6	ns	1,150
1-Methylnaphthalene	<4.9	<4.6	9330	na	na	na	na	na	na	218	ns	17,600
2-Methylnaphthalene	<6.1	<5.7	16900	na	na	na	na	na	na	470	ns	239,000
Naphthalene	<10.2	<9.6	<b><u>6380</u></b>	na	na	na	na	na	na	656	658.7	5,520
Phenanthrene	<14.2	<13.2	<679	na	na	na	na	na	na	<13.6	ns	ns
Pyrene	<5.5	<5.1	<263	na	na	na	na	na	na	<5.3	54,772	1,790,000
Total Cancer Risk*	6.0x10 <sup>-8</sup>	5.5 x10 <sup>-8</sup>	2.8 x10 <sup>-6</sup>	--	--	--	--	--	--	5.6 x10 <sup>-8</sup>	ns	5. x10 <sup>-6</sup>

- VOCs and PAHs are reported in ug/kg  
- GRO reported in mg/kg  
- na = not analyzed  
- ns = no standard established

- (J) = present below limit of quantitation  
- Groundwater Pathway RCL (exceedances bold)  
- Direct Contact Hazard RCL - non-industrial (exceedances underlined)  
\* = Large Cancerous PAH; -total risk used for direct contact hazard evaluation

TABLE 2  
SUMMARY OF GEOPROBE GROUNDWATER ANALYTICAL DATA (06/22/2017)  
Former Jerry's Service  
2477 North Holton Street – Milwaukee, Wisconsin

Sample I.D.	B-5	B-8	NR140	
VOCs			ES	PAL
Benzene	<b>774</b>	<b>23.8</b>	5	0.5
1,2 Dichloroethane	<6.7	na	5	0.5
Ethylbenzene	<b>1320</b>	5.8	700	140
Methyl-tert-butyl ether	<7.0	1.9	60	12
Toluene	123	2.1	800	160
1,3,5 Trimethylbenzenes	177	1.3	ns	ns
1,2,4 Trimethylbenzenes	1650	3.1	ns	ns
Total Trimethylbenzenes	<b>1827</b>	4.4	480	96
Xylenes, -m, -p	1960	13.8	ns	ns
Xylene, -o	95.3	1.2	ns	ns
Total Xylenes	<b>2055.3</b>	15	2000	400
Naphthalene	<b>452</b>	na	100	10
n-Butylbenzene	32.6	na	ns	ns
s-Butylbenzene	<87.4	na	ns	ns
Chloroform	<100	na	6	0.6
Isopropylbenzene	66.6	na	ns	ns
p-Isopropyltoluene	<20.0	na	ns	ns
n-Propylbenzene	177	na	ns	ns
PAHs				
Acenaphthrene	0.24	<0.0056	ns	ns
Acenaphthylene	<0.19	<0.0046	ns	ns
Anthracene	<0.39	<0.0096	3000	600
Benzo(a)anthracene	<0.28	<0.0069	ns	ns
Benzo(a)pyrene	<0.39	<0.0097	0.2	0.02
Benzo(b)fluoranthene	<0.21	<0.0053	0.2	0.02
Benzo(g,h,i)perylene	<0.25	<0.0062	ns	ns
Benzo(k)fluoranthene	<0.28	<0.0069	ns	ns
Chrysene	<0.49	<0.012	0.2	0.02
Dibenzo(a,h)anthracene	<0.37	<0.0092	ns	ns
Fluoranthene	<0.40	<0.0098	400	80
Fluorene	<0.30	<0.0073	400	80
Indeno(1,2,3-cd)pyrene	<0.66	<0.016	ns	ns
1-Methylnaphthalene	60.3	0.16	ns	ns
2-Methylnaphthalene	117	0.23	ns	ns
Naphthalene	<b>345</b>	0.85	100	10
Phenanthrene	<0.52	0.014 (J)	ns	ns
Pyrene	<0.29	0.0071 (J)	250	50

- All data is listed in ug/l  
- na = not analyzed  
- ns = no standard established

- PAL = NR140 Preventative Action Limit (exceedances underlined)  
- ES = NR140 Enforcement Standard (exceedances bold)  
-(J) = present below limit of quantitation

**TABLE 3**  
**SUMMARY OF PETROLEUM VOLATILE ORGANIC COMPOUNDS IN SOIL**  
**Former Jerry's Service - 2477 North Holton Street - Milwaukee, WI**

	SAMPLE	Depth (ft)	DRO	GRO	Benzene	1,2 Dichloroethane	Ethylbenzene	Methyl-tert-butyl ether	Toluene	1,3,5 Trimethylbenzene	1,2,4 Trimethylbenzene	Total Trimethylbenzenes	Total Xylenes	Naphthalene
Tank Closure 11/18/10	Tank #1 North	6	309	2670	<1000	na	<u>42000</u>	<1000	<b>5440</b>	48500	142000	<b>190500</b>	<b>232700</b>	<u>27400</u>
	Tank #1 South	6	90.4	969	<500	na	<u>9060</u>	<500	<b>1360</b>	20700	57800	<b>78500</b>	<b>41560</b>	<u>10200</u>
	Tank #2 North	8	333	384	<250	na	5210	<250	898	9760	31100	<b>40860</b>	<b>23770</b>	<u>9530</u>
	Tank #2 South	8	1400	1120	<500	na	<u>16800</u>	<500	<b>4550</b>	18700	60400	<b>79100</b>	<b>72100</b>	<u>15600</u>
	Tank #3 North	8	259	935	<500	na	<u>13900</u>	<500	<b>2870</b>	15200	51100	<b>66300</b>	<b>58500</b>	<u>12400</u>
	Tank #3 South	8	482	861	<500	na	<u>9420</u>	<500	<b>1210</b>	23500	66200	<b>89700</b>	<b>48110</b>	<u>10600</u>
	Pipeline	2	44.5	43.5	<b>48.9</b>	na	<b>1530</b>	<25.0	353	1240	4980	<b>6220</b>	<b>6180</b>	<b>920</b>
Geoprobe Assessment 06/22/17	B-1	2	na	<3.0	<25.0	na	<25.0	<25.0	30.7(J)	<25.0	<25.0	<50.0	<75.0	na
	B-2	3	na	<2.8	<25.0	na	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	na
	B-3	3.5	na	na	<500	<500	<b>1930</b>	<500	<500	37800	153000	<b>190800</b>	<b>9400</b>	<b>9830</b>
	B-4	7	na	na	<u>6030</u>	na	<b>5380</b>	<b>51.6(J)</b>	<b>1250</b>	671	2870	<b>3541</b>	<b>21990</b>	<b>1250</b>
	B-5	7	na	na	<b>89.2</b>	na	<b>2620</b>	<b>44.9(J)</b>	95.9	503	8380	<b>8883</b>	<b>4129</b>	<b>3200</b>
	B-6	5	na	na	<b>540(J)</b>	na	<u>19600</u>	<250	971	17500	63500	<b>81000</b>	<b>26250</b>	<b>9300</b>
	B-7	4	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0
	B-7	7	na	na	<25.0	na	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	65.8
	B-8	7	na	na	<b>5450</b>	na	<b>1080</b>	<b>47.0(J)</b>	<b>1510</b>	105	402	<b>507</b>	<b>4180</b>	103
B-9	4	na	na	<u>11600</u>	<625	<u>80700</u>	<625	<b>251000</b>	43800	151000	<b>194800</b>	<b>393000</b>	<b>25000</b>	
Groundwater Pathway RCL			ns	ns	5.1	2.8	1570	27	1107	ns	ns	1379	3940	658.7
Direct Contact Hazard RCL			ns	ns	1600	652	8020	63,800	818,000	182,000	219,000	ns	260,000	5520

- GRO and DRO are reported in mg/kg; VOCs are in ug/kg  
- na = not analyzed  
- ns = no standard established

- (J) = present below limit of quantitation  
- Groundwater Pathway RCL (exceedances bold)  
- Direct Contact Hazard RCL - non-industrial (exceedances underlined)

# **APPENDIX A**

## **BORING LOGS**



Facility/Project Name <b>Former Jerry's Service</b>			Seymour Project Number <b>10746.01</b>			License/Permit/Monitoring Number <b>B-1</b>							
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>06/22/17</b>							
Boring or Well Number <b>B-1</b>			WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level <b>--</b>	Surface Elevation				
SW <u>¼</u> of SW <u>¼</u> of Section <u>16</u> T <u>7</u> N R <u>22</u> E						Grid Location (if applicable)							
County <b>Milwaukee</b>		County Code <b>41</b>			Civil Town <b>Milwaukee</b>								
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION			D I A M E T E R	U S E S	R Q D	S t a b l e O V M (vppm)	Soil Properties  q    W    LL    PL    P200			B l o w C o u n t
1	60	5	Concrete Brown silty clay Sand seam at 3 ft (6 inches thick) Brown silty clay End of boring			CL		0					
						SW		0					
						CL		0					
Signature		<i>Robyn Seymour</i>			Firm: Seymour Environmental Services, Inc.								

Facility/Project Name <b>Former Jerry's Service</b>				Seymour Project Number <b>10746.01</b>			License/Permit/Monitoring Number <b>B-2</b>							
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>							Date Installed <b>06/22/17</b>							
Boring or Well Number <b>B-2</b>				WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level <b>--</b>		Surface Elevation			
SW <u>1/4</u> of SW <u>1/4</u> of Section <u>16</u> T <u>7</u> N R <u>22</u> E				Grid Location (if applicable)										
County <b>Milwaukee</b>		County Code <b>41</b>			Civil Town <b>Milwaukee</b>									
S A M P L E	R E C O R D S	D E P T H (ft)	SOIL/ROCK DESCRIPTION			D I A M E T E R	U S E S	R Q D	S t a b l e O V M (vppm)	Soil Properties  q    W    LL    PL    P200			B l o w C o u n t	
1	60	5	Concrete Brown silty clay Sand with gravel at 3 ft Brown silty clay End of boring					CL SW CL	0  0					
Signature		<i>Robyn Seymour</i>				Firm: Seymour Environmental Services, Inc.								

Facility/Project Name Former Jerry's Service				Seymour Project Number 10746.01			License/Permit/Monitoring Number B-3								
Boring Drilled by On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)						Date Installed 06/22/17									
Boring or Well Number B-3				WI Unique Well Number (assigned by DNR)			Borehole Diameter 2-inch		Water Level --			Surface Elevation			
SW ¼ of SW ¼ of Section 16 T 7 N R 22 E						Grid Location (if applicable)									
County Milwaukee			County Code 41			Civil Town Milwaukee									
S	R	D	SOIL/ROCK DESCRIPTION			D	U	R	Stable O V M (vppm)	Soil Properties					Blow Count
A	E	E				W									
M	O	P				L	G	C		q	W	LL	PL	P200	
P	V	T				L	R	C							
L	E	H				L	A	S							
E	R	(ft)				M									
1	60	5	Concrete Gravel Silty clay Brown silty clay Staining/odor bottom foot						0 1350						
Signature		<i>Robyn Seymour</i>				Firm: Seymour Environmental Services, Inc.									

Facility/Project Name <b>Former Jerry's Service</b>				Seymour Project Number <b>10746.01</b>		License/Permit/Monitoring Number <b>B-4</b>						
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>06/22/17</b>						
Boring or Well Number    WI Unique Well Number (assigned by DNR) <b>B-4</b>				Borehole Diameter <b>2-inch</b>		Water Level    Surface Elevation <b>--</b>						
SW ¼ of SW ¼ of Section <u>16</u> T <u>7</u> N R <u>22</u> E						Grid Location (if applicable)						
County <b>Milwaukee</b>		County Code <b>28</b>		Civil Town <b>Milwaukee</b>								
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I A M E T E R	U S C S	R Q D	Stable O V M (vppm)	Soil Properties			Blow Count	
1	60	5	Asphalt and gravel Medium brown silty sand  Brown silty clay		SM		0					
					CL		0					
2	54	10	Brown silty clay  End of boring		CL		150					
					ML							
Signature		<i>Robyn Seymour</i>				Firm: Seymour Environmental Services, Inc.						

Facility/Project Name <b>Former Jerry's Service</b>				Seymour Project Number <b>10746.01</b>			License/Permit/Monitoring Number <b>B-5</b>						
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>06/22/17</b>							
Boring or Well Number    WI Unique Well Number (assigned by DNR) <b>B-5</b>				Borehole Diameter <b>2-inch</b>			Water Level    Surface Elevation <b>~8 ft</b>						
SW <u>1/4</u> of SW <u>1/4</u> of Section <u>16</u> T <u>7</u> N R <u>22</u> E						Grid Location (if applicable)							
County <b>Milwaukee</b>			County Code <b>28</b>			Civil Town <b>Milwaukee</b>							
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION			D I A M E T E R	U S E D	R Q D	S t a b l e O V M (vppm)	Soil Properties  q    W    LL    PL    P200			B l o w C o u n t
1	60	5	Asphalt and gravel Fine grained m brown sand (fill)			SW		0					
						CL							
2	54	10	Change to gray silty clay (stained) Water ~ 8 ft, went to 12 to get sample			CL		65					
		12	End of boring			ML							
Signature		<i>Robyn Seymour</i>				Firm: Seymour Environmental Services, Inc.							

Facility/Project Name <b>Former Jerry's Service</b>				Seymour Project Number <b>10746.01</b>		License/Permit/Monitoring Number <b>B-6</b>					
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>06/22/17</b>					
Boring or Well Number    WI Unique Well Number (assigned by DNR) <b>B-6</b>				Borehole Diameter <b>2-inch</b>		Water Level    Surface Elevation <b>--</b>					
SW <u>1/4</u> of SW <u>1/4</u> of Section <u>16</u> T <u>7</u> N R <u>22</u> E				Grid Location (if applicable)							
County <b>Milwaukee</b>		County Code <b>28</b>		Civil Town <b>Milwaukee</b>							
S A M P L E	R E C O R D S	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I A M E T E R	U S E S	R Q D	S t a b l e O V M (vppm)	Soil Properties			B l o w C o u n t
1	60	5	Asphalt and gravel Fine grained m brown sand (fill)	SW		0					
				CL							
2	54	10	Change to gray silty clay Water ~ 8 ft End of boring	CL		150					
				ML							
Signature		<i>Robyn Seymour</i>				Firm: Seymour Environmental Services, Inc.					

Facility/Project Name <b>Former Jerry's Service</b>				Seymour Project Number <b>10746.01</b>			License/Permit/Monitoring Number <b>B-7</b>						
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>				Date Installed <b>06/22/17</b>									
Boring or Well Number <b>B-7</b>				WI Unique Well Number (assigned by DNR) <b>W1</b>			Borehole Diameter <b>2-inch</b>			Water Level <b>--</b>		Surface Elevation <b>--</b>	
SW <u>16</u> of SW <u>7</u> of Section <u>16</u> T <u>7</u> N R <u>22</u> E				Grid Location (if applicable)									
County <b>Milwaukee</b>		County Code <b>28</b>		Civil Town <b>Milwaukee</b>									
S A M P L E	R E C O R D E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I A M E T E R	U N D E R S O I L	R E Q U I R E D	S T A B L E O V E R L A Y S (vppm)	Soil Properties					Blow Count
								q	W	LL	PL	P200	
1	60	5	Asphalt and gravel Brown silty clay				0						
2	54	10	Sandy layers interbedded with tight clay				38						
3		15	Same as above Could not get a water sample  End of boring				0						
Signature		<i>Robyn Seymour</i>		Firm: Seymour Environmental Services, Inc.									

Facility/Project Name <b>Former Jerry's Service</b>				Seymour Project Number <b>10746.01</b>				License/Permit/Monitoring Number <b>B-8</b>					
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>								Date Installed <b>06/22/17</b>					
Boring or Well Number <b>B-8</b>				WI Unique Well Number (assigned by DNR)				Borehole Diameter <b>2-inch</b>		Water Level		Surface Elevation	
SW ¼ of SW ¼ of Section <u>16</u> T <u>7</u> N R <u>22</u> E				Grid Location (if applicable)									
County <b>Milwaukee</b>				County Code <b>28</b>				Civil Town <b>Milwaukee</b>					
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I S T R I B U T I O N	U R D S	R Q D	Stable O V M (vppm)	Soil Properties				Blow Count	
1	60	5	Concrete, Dense brown silty clay				0						
2	54	10	Sandy layers interbedded with tight clay Sand layers were well graded, wet				38						
3		15	Same as above  End of boring				0						
Signature		<i>Robyn Seymour</i>				Firm: Seymour Environmental Services, Inc.							



Facility/Project Name <b>Former Jerry's Service</b>				Seymour Project Number <b>10746.01</b>			License/Permit/Monitoring Number <b>B-9</b>							
Boring Drilled by <b>On-site (Tony Kapugi) Seymour Environmental (Robyn Seymour)</b>							Date Installed <b>06/22/17</b>							
Boring or Well Number <b>B-9</b>				WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level		Surface Elevation			
SW <u>16</u> of SW <u>7</u> of Section <u>16</u> T <u>7</u> N R <u>22</u> E				Grid Location (if applicable)										
County <b>Milwaukee</b>		County Code <b>28</b>			Civil Town <b>Milwaukee</b>									
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION			D I A M E T E R	U N D E R S O I L	R E Q U I R E D	S T A B L E O V O L U M E (vppm)	Soil Properties  q    W    LL    PL    P200			B L O W C O U N T	
1	60	5	Ashpalt Brown silty clay, hydrocarbon Staining and odor					CL	1500					
			End of boring											
Signature		<i>Robyn Seymour</i>			Firm: Seymour Environmental Services, Inc.									



## **APPENDIX B**

### **LABORATORY REPORT**

July 18, 2017

Robyn Seymour  
Seymour Environmental Services, INC.  
2531 Dyreson Road  
Mc Farland, WI 53558

RE: Project: KP VENTURES  
Pace Project No.: 40152390

Dear Robyn Seymour:

Enclosed are the analytical results for sample(s) received by the laboratory on June 28, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Dan Milewsky  
dan.milewsky@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: KP VENTURES

Pace Project No.: 40152390

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE SUMMARY

Project: KP VENTURES  
Pace Project No.: 40152390

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40152390001	B-1, 2'	Solid	06/22/17 08:45	06/28/17 10:05
40152390002	B-2, 3'	Solid	06/22/17 08:55	06/28/17 10:05
40152390003	B-3, 3 1/2'	Solid	06/22/17 09:00	06/28/17 10:05
40152390004	B-4, 7'	Solid	06/22/17 09:20	06/28/17 10:05
40152390005	B-5,7'	Solid	06/22/17 09:30	06/28/17 10:05
40152390006	B-5	Water	06/22/17 09:45	06/28/17 10:05
40152390007	B-6,5'	Solid	06/22/17 09:55	06/28/17 10:05
40152390008	B-7,4'	Solid	06/22/17 10:15	06/28/17 10:05
40152390009	B-7,7'	Solid	06/22/17 10:20	06/28/17 10:05
40152390010	B-8	Water	06/22/17 11:00	06/28/17 10:05
40152390011	B-8 7'	Solid	06/22/17 10:45	06/28/17 10:05
40152390012	B-9, 4'	Solid	06/22/17 11:30	06/28/17 10:05

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: KP VENTURES

Pace Project No.: 40152390

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40152390001	B-1, 2'	WI MOD GRO	ALD	10
		EPA 8270 by SIM	ARO	20
		ASTM D2974-87	RMV	1
40152390002	B-2, 3'	WI MOD GRO	ALD	10
		EPA 8270 by SIM	ARO	20
		ASTM D2974-87	RMV	1
40152390003	B-3, 3 1/2'	EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	RMV	1
40152390004	B-4, 7'	WI MOD GRO	ALD	10
		ASTM D2974-87	RMV	1
40152390005	B-5,7'	WI MOD GRO	ALD	10
		ASTM D2974-87	RMV	1
40152390006	B-5	EPA 8270 by HVI	TPO	20
		EPA 8260	HNW	64
40152390007	B-6,5'	WI MOD GRO	ALD	10
		ASTM D2974-87	RMV	1
40152390008	B-7,4'	EPA 8260	SMT	64
		ASTM D2974-87	RMV	1
40152390009	B-7,7'	WI MOD GRO	ALD	10
		ASTM D2974-87	RMV	1
40152390010	B-8	WI MOD GRO	ALD	9
		EPA 8270 by HVI	TPO	20
40152390011	B-8 7'	WI MOD GRO	ALD	10
		ASTM D2974-87	RMV	1
40152390012	B-9, 4'	EPA 8270 by SIM	ARO	20
		EPA 8260	SMT	64
		ASTM D2974-87	RMV	1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: KP VENTURES

Pace Project No.: 40152390

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40152390001</b>	<b>B-1, 2'</b>					
WI MOD GRO	Toluene	30.7J	ug/kg	73.2	06/29/17 10:25	
ASTM D2974-87	Percent Moisture	18.0	%	0.10	07/10/17 13:23	
<b>40152390002</b>	<b>B-2, 3'</b>					
ASTM D2974-87	Percent Moisture	12.0	%	0.10	07/10/17 13:23	
<b>40152390003</b>	<b>B-3, 3 1/2'</b>					
EPA 8270 by SIM	1-Methylnaphthalene	9330	ug/kg	781	07/17/17 12:41	
EPA 8270 by SIM	2-Methylnaphthalene	16900	ug/kg	974	07/17/17 12:41	
EPA 8270 by SIM	Naphthalene	6380	ug/kg	1640	07/17/17 12:41	
EPA 8260	sec-Butylbenzene	933J	ug/kg	1400	06/29/17 22:40	
EPA 8260	Ethylbenzene	1930	ug/kg	1400	06/29/17 22:40	
EPA 8260	p-Isopropyltoluene	1880	ug/kg	1400	06/29/17 22:40	
EPA 8260	Naphthalene	9830	ug/kg	5840	06/29/17 22:40	
EPA 8260	n-Propylbenzene	1910	ug/kg	1400	06/29/17 22:40	
EPA 8260	1,2,4-Trimethylbenzene	153000	ug/kg	1400	06/29/17 22:40	
EPA 8260	1,3,5-Trimethylbenzene	37800	ug/kg	1400	06/29/17 22:40	
EPA 8260	m&p-Xylene	8240	ug/kg	2800	06/29/17 22:40	
EPA 8260	o-Xylene	1160J	ug/kg	1400	06/29/17 22:40	
ASTM D2974-87	Percent Moisture	14.3	%	0.10	07/10/17 13:23	
<b>40152390004</b>	<b>B-4, 7'</b>					
WI MOD GRO	Benzene	6030	ug/kg	70.0	06/29/17 15:32	
WI MOD GRO	Ethylbenzene	5380	ug/kg	70.0	06/29/17 15:32	
WI MOD GRO	Methyl-tert-butyl ether	51.6J	ug/kg	70.0	06/29/17 15:32	
WI MOD GRO	Naphthalene	1250	ug/kg	70.0	06/29/17 15:32	
WI MOD GRO	Toluene	7870	ug/kg	70.0	06/29/17 15:32	
WI MOD GRO	1,2,4-Trimethylbenzene	2870	ug/kg	70.0	06/29/17 15:32	
WI MOD GRO	1,3,5-Trimethylbenzene	671	ug/kg	70.0	06/29/17 15:32	
WI MOD GRO	m&p-Xylene	16100	ug/kg	140	06/29/17 15:32	
WI MOD GRO	o-Xylene	5890	ug/kg	70.0	06/29/17 15:32	
ASTM D2974-87	Percent Moisture	14.2	%	0.10	07/10/17 13:23	
<b>40152390005</b>	<b>B-5, 7'</b>					
WI MOD GRO	Benzene	89.2	ug/kg	71.0	06/29/17 15:58	
WI MOD GRO	Ethylbenzene	2620	ug/kg	71.0	06/29/17 15:58	
WI MOD GRO	Methyl-tert-butyl ether	44.9J	ug/kg	71.0	06/29/17 15:58	
WI MOD GRO	Naphthalene	3200	ug/kg	71.0	06/29/17 15:58	
WI MOD GRO	Toluene	95.9	ug/kg	71.0	06/29/17 15:58	
WI MOD GRO	1,2,4-Trimethylbenzene	8380	ug/kg	71.0	06/29/17 15:58	
WI MOD GRO	1,3,5-Trimethylbenzene	503	ug/kg	71.0	06/29/17 15:58	
WI MOD GRO	m&p-Xylene	4010	ug/kg	142	06/29/17 15:58	
WI MOD GRO	o-Xylene	119	ug/kg	71.0	06/29/17 15:58	
ASTM D2974-87	Percent Moisture	15.5	%	0.10	07/10/17 11:50	
<b>40152390006</b>	<b>B-5</b>					
EPA 8270 by HVI	Acenaphthene	0.24J	ug/L	1.1	06/30/17 16:13	
EPA 8270 by HVI	1-Methylnaphthalene	60.3	ug/L	1.1	06/30/17 16:13	
EPA 8270 by HVI	2-Methylnaphthalene	117	ug/L	0.92	06/30/17 16:13	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: KP VENTURES

Pace Project No.: 40152390

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40152390006</b>	<b>B-5</b>					
EPA 8270 by HVI	Naphthalene	345	ug/L	3.4	06/30/17 16:13	
EPA 8260	Benzene	774	ug/L	40.0	06/29/17 19:03	
EPA 8260	n-Butylbenzene	32.6J	ug/L	40.0	06/29/17 19:03	
EPA 8260	Ethylbenzene	1320	ug/L	40.0	06/29/17 19:03	
EPA 8260	Isopropylbenzene (Cumene)	66.6	ug/L	40.0	06/29/17 19:03	
EPA 8260	Naphthalene	452	ug/L	200	06/29/17 19:03	
EPA 8260	n-Propylbenzene	177	ug/L	40.0	06/29/17 19:03	
EPA 8260	Toluene	123	ug/L	40.0	06/29/17 19:03	
EPA 8260	1,2,4-Trimethylbenzene	1650	ug/L	40.0	06/29/17 19:03	
EPA 8260	1,3,5-Trimethylbenzene	177	ug/L	40.0	06/29/17 19:03	
EPA 8260	m&p-Xylene	1960	ug/L	80.0	06/29/17 19:03	
EPA 8260	o-Xylene	95.3	ug/L	40.0	06/29/17 19:03	
<b>40152390007</b>	<b>B-6,5'</b>					
WI MOD GRO	Benzene	540J	ug/kg	660	06/29/17 16:49	
WI MOD GRO	Ethylbenzene	19600	ug/kg	660	06/29/17 16:49	
WI MOD GRO	Naphthalene	9300	ug/kg	660	06/29/17 16:49	
WI MOD GRO	Toluene	971	ug/kg	660	06/29/17 16:49	
WI MOD GRO	1,2,4-Trimethylbenzene	63500	ug/kg	660	06/29/17 16:49	
WI MOD GRO	1,3,5-Trimethylbenzene	17500	ug/kg	660	06/29/17 16:49	
WI MOD GRO	m&p-Xylene	23100	ug/kg	1320	06/29/17 16:49	
WI MOD GRO	o-Xylene	3150	ug/kg	660	06/29/17 16:49	
ASTM D2974-87	Percent Moisture	9.1	%	0.10	07/10/17 11:50	
<b>40152390008</b>	<b>B-7,4'</b>					
ASTM D2974-87	Percent Moisture	14.7	%	0.10	07/10/17 11:50	
<b>40152390009</b>	<b>B-7,7'</b>					
WI MOD GRO	Naphthalene	65.8	ug/kg	65.7	06/29/17 11:16	
ASTM D2974-87	Percent Moisture	8.7	%	0.10	07/10/17 11:50	
<b>40152390010</b>	<b>B-8</b>					
WI MOD GRO	Benzene	23.8	ug/L	1.0	06/29/17 13:33	
WI MOD GRO	Ethylbenzene	5.8	ug/L	1.0	06/29/17 13:33	
WI MOD GRO	Methyl-tert-butyl ether	1.9	ug/L	1.0	06/29/17 13:33	
WI MOD GRO	Toluene	2.1	ug/L	1.0	06/29/17 13:33	
WI MOD GRO	1,2,4-Trimethylbenzene	3.1	ug/L	1.0	06/29/17 13:33	
WI MOD GRO	1,3,5-Trimethylbenzene	1.3	ug/L	1.0	06/29/17 13:33	
WI MOD GRO	m&p-Xylene	13.8	ug/L	2.0	06/29/17 13:33	
WI MOD GRO	o-Xylene	1.2	ug/L	1.0	06/29/17 13:33	
EPA 8270 by HVI	1-Methylnaphthalene	0.16	ug/L	0.027	06/30/17 14:03	
EPA 8270 by HVI	2-Methylnaphthalene	0.23	ug/L	0.022	06/30/17 14:03	
EPA 8270 by HVI	Naphthalene	0.85	ug/L	0.084	06/30/17 14:03	
EPA 8270 by HVI	Phenanthrene	0.014J	ug/L	0.063	06/30/17 14:03	
EPA 8270 by HVI	Pyrene	0.0071J	ug/L	0.035	06/30/17 14:03	
<b>40152390011</b>	<b>B-8 7'</b>					
WI MOD GRO	Benzene	5450	ug/kg	69.5	06/29/17 11:42	
WI MOD GRO	Ethylbenzene	1080	ug/kg	69.5	06/29/17 11:42	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: KP VENTURES

Pace Project No.: 40152390

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40152390011</b>	<b>B-8 7'</b>					
WI MOD GRO	Methyl-tert-butyl ether	47.0J	ug/kg	69.5	06/29/17 11:42	
WI MOD GRO	Naphthalene	103	ug/kg	69.5	06/29/17 11:42	
WI MOD GRO	Toluene	1510	ug/kg	69.5	06/29/17 11:42	
WI MOD GRO	1,2,4-Trimethylbenzene	402	ug/kg	69.5	06/29/17 11:42	
WI MOD GRO	1,3,5-Trimethylbenzene	105	ug/kg	69.5	06/29/17 11:42	
WI MOD GRO	m&p-Xylene	3070	ug/kg	139	06/29/17 11:42	
WI MOD GRO	o-Xylene	1110	ug/kg	69.5	06/29/17 11:42	
ASTM D2974-87	Percent Moisture	13.7	%	0.10	07/10/17 11:50	
<b>40152390012</b>	<b>B-9, 4'</b>					
EPA 8270 by SIM	1-Methylnaphthalene	218	ug/kg	15.6	07/06/17 18:07	
EPA 8270 by SIM	2-Methylnaphthalene	470	ug/kg	19.4	07/06/17 18:07	
EPA 8270 by SIM	Naphthalene	656	ug/kg	32.7	07/06/17 18:07	
EPA 8260	Benzene	11600	ug/kg	1750	06/29/17 23:03	
EPA 8260	n-Butylbenzene	14400	ug/kg	1750	06/29/17 23:03	
EPA 8260	sec-Butylbenzene	2380	ug/kg	1750	06/29/17 23:03	
EPA 8260	Chloroform	1880J	ug/kg	7290	06/29/17 23:03	
EPA 8260	Ethylbenzene	80700	ug/kg	1750	06/29/17 23:03	
EPA 8260	Isopropylbenzene (Cumene)	5780	ug/kg	1750	06/29/17 23:03	
EPA 8260	p-Isopropyltoluene	1380J	ug/kg	1750	06/29/17 23:03	
EPA 8260	Naphthalene	25000	ug/kg	7290	06/29/17 23:03	
EPA 8260	n-Propylbenzene	28900	ug/kg	1750	06/29/17 23:03	
EPA 8260	Toluene	251000	ug/kg	1750	06/29/17 23:03	
EPA 8260	1,2,4-Trimethylbenzene	151000	ug/kg	1750	06/29/17 23:03	
EPA 8260	1,3,5-Trimethylbenzene	43800	ug/kg	1750	06/29/17 23:03	
EPA 8260	m&p-Xylene	288000	ug/kg	3500	06/29/17 23:03	
EPA 8260	o-Xylene	105000	ug/kg	1750	06/29/17 23:03	
ASTM D2974-87	Percent Moisture	14.2	%	0.10	07/10/17 11:50	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-1, 2' Lab ID: 40152390001 Collected: 06/22/17 08:45 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>									
Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:25	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:25	100-41-4	W
Gasoline Range Organics	<3.0	mg/kg	6.1	3.0	1	06/29/17 07:45	06/29/17 10:25		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:25	1634-04-4	W
Toluene	30.7J	ug/kg	73.2	30.5	1	06/29/17 07:45	06/29/17 10:25	108-88-3	
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:25	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:25	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/29/17 07:45	06/29/17 10:25	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:25	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1	06/29/17 07:45	06/29/17 10:25	98-08-8	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Acenaphthene	<4.7	ug/kg	15.7	4.7	1	07/04/17 07:11	07/06/17 17:50	83-32-9	
Acenaphthylene	<4.0	ug/kg	13.4	4.0	1	07/04/17 07:11	07/06/17 17:50	208-96-8	
Anthracene	<7.0	ug/kg	23.1	7.0	1	07/04/17 07:11	07/06/17 17:50	120-12-7	
Benzo(a)anthracene	<3.9	ug/kg	12.9	3.9	1	07/04/17 07:11	07/06/17 17:50	56-55-3	
Benzo(a)pyrene	<3.1	ug/kg	10.2	3.1	1	07/04/17 07:11	07/06/17 17:50	50-32-8	
Benzo(b)fluoranthene	<3.4	ug/kg	11.5	3.4	1	07/04/17 07:11	07/06/17 17:50	205-99-2	
Benzo(g,h,i)perylene	<2.5	ug/kg	8.2	2.5	1	07/04/17 07:11	07/06/17 17:50	191-24-2	
Benzo(k)fluoranthene	<3.1	ug/kg	10.2	3.1	1	07/04/17 07:11	07/06/17 17:50	207-08-9	
Chrysene	<4.1	ug/kg	13.6	4.1	1	07/04/17 07:11	07/06/17 17:50	218-01-9	
Dibenz(a,h)anthracene	<2.7	ug/kg	9.1	2.7	1	07/04/17 07:11	07/06/17 17:50	53-70-3	
Fluoranthene	<6.3	ug/kg	21.2	6.3	1	07/04/17 07:11	07/06/17 17:50	206-44-0	
Fluorene	<5.0	ug/kg	16.8	5.0	1	07/04/17 07:11	07/06/17 17:50	86-73-7	
Indeno(1,2,3-cd)pyrene	<2.7	ug/kg	8.9	2.7	1	07/04/17 07:11	07/06/17 17:50	193-39-5	
1-Methylnaphthalene	<4.9	ug/kg	16.3	4.9	1	07/04/17 07:11	07/06/17 17:50	90-12-0	
2-Methylnaphthalene	<6.1	ug/kg	20.3	6.1	1	07/04/17 07:11	07/06/17 17:50	91-57-6	
Naphthalene	<10.2	ug/kg	34.2	10.2	1	07/04/17 07:11	07/06/17 17:50	91-20-3	
Phenanthrene	<14.2	ug/kg	47.2	14.2	1	07/04/17 07:11	07/06/17 17:50	85-01-8	
Pyrene	<5.5	ug/kg	18.3	5.5	1	07/04/17 07:11	07/06/17 17:50	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	52	%	19-96		1	07/04/17 07:11	07/06/17 17:50	321-60-8	
Terphenyl-d14 (S)	57	%	31-98		1	07/04/17 07:11	07/06/17 17:50	1718-51-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	18.0	%	0.10	0.10	1		07/10/17 13:23		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-2, 3' Lab ID: 40152390002 Collected: 06/22/17 08:55 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>									
Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:50	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:50	100-41-4	W
Gasoline Range Organics	<2.8	mg/kg	5.7	2.8	1	06/29/17 07:45	06/29/17 10:50		
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:50	1634-04-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:50	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:50	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:50	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/29/17 07:45	06/29/17 10:50	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 10:50	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	106	%	80-120		1	06/29/17 07:45	06/29/17 10:50	98-08-8	
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Acenaphthene	<4.4	ug/kg	14.7	4.4	1	07/04/17 07:11	07/06/17 10:55	83-32-9	
Acenaphthylene	<3.7	ug/kg	12.5	3.7	1	07/04/17 07:11	07/06/17 10:55	208-96-8	
Anthracene	<6.5	ug/kg	21.6	6.5	1	07/04/17 07:11	07/06/17 10:55	120-12-7	
Benzo(a)anthracene	<3.6	ug/kg	12.0	3.6	1	07/04/17 07:11	07/06/17 10:55	56-55-3	
Benzo(a)pyrene	<2.9	ug/kg	9.5	2.9	1	07/04/17 07:11	07/06/17 10:55	50-32-8	
Benzo(b)fluoranthene	<3.2	ug/kg	10.7	3.2	1	07/04/17 07:11	07/06/17 10:55	205-99-2	
Benzo(g,h,i)perylene	<2.3	ug/kg	7.7	2.3	1	07/04/17 07:11	07/06/17 10:55	191-24-2	
Benzo(k)fluoranthene	<2.8	ug/kg	9.5	2.8	1	07/04/17 07:11	07/06/17 10:55	207-08-9	
Chrysene	<3.8	ug/kg	12.7	3.8	1	07/04/17 07:11	07/06/17 10:55	218-01-9	M1
Dibenz(a,h)anthracene	<2.5	ug/kg	8.5	2.5	1	07/04/17 07:11	07/06/17 10:55	53-70-3	
Fluoranthene	<5.9	ug/kg	19.8	5.9	1	07/04/17 07:11	07/06/17 10:55	206-44-0	
Fluorene	<4.7	ug/kg	15.7	4.7	1	07/04/17 07:11	07/06/17 10:55	86-73-7	
Indeno(1,2,3-cd)pyrene	<2.5	ug/kg	8.3	2.5	1	07/04/17 07:11	07/06/17 10:55	193-39-5	
1-Methylnaphthalene	<4.6	ug/kg	15.2	4.6	1	07/04/17 07:11	07/06/17 10:55	90-12-0	R1
2-Methylnaphthalene	<5.7	ug/kg	19.0	5.7	1	07/04/17 07:11	07/06/17 10:55	91-57-6	M1
Naphthalene	<9.6	ug/kg	31.9	9.6	1	07/04/17 07:11	07/06/17 10:55	91-20-3	
Phenanthrene	<13.2	ug/kg	44.1	13.2	1	07/04/17 07:11	07/06/17 10:55	85-01-8	
Pyrene	<5.1	ug/kg	17.0	5.1	1	07/04/17 07:11	07/06/17 10:55	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	56	%	19-96		1	07/04/17 07:11	07/06/17 10:55	321-60-8	
Terphenyl-d14 (S)	64	%	31-98		1	07/04/17 07:11	07/06/17 10:55	1718-51-0	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.0	%	0.10	0.10	1		07/10/17 13:23		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-3, 3 1/2 Lab ID: 40152390003 Collected: 06/22/17 09:00 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Acenaphthene	<226	ug/kg	752	226	50	07/04/17 07:11	07/17/17 12:41	83-32-9	
Acenaphthylene	<192	ug/kg	641	192	50	07/04/17 07:11	07/17/17 12:41	208-96-8	
Anthracene	<333	ug/kg	1110	333	50	07/04/17 07:11	07/17/17 12:41	120-12-7	
Benzo(a)anthracene	<185	ug/kg	618	185	50	07/04/17 07:11	07/17/17 12:41	56-55-3	
Benzo(a)pyrene	<146	ug/kg	488	146	50	07/04/17 07:11	07/17/17 12:41	50-32-8	
Benzo(b)fluoranthene	<165	ug/kg	549	165	50	07/04/17 07:11	07/17/17 12:41	205-99-2	
Benzo(g,h,i)perylene	<118	ug/kg	395	118	50	07/04/17 07:11	07/17/17 12:41	191-24-2	
Benzo(k)fluoranthene	<146	ug/kg	487	146	50	07/04/17 07:11	07/17/17 12:41	207-08-9	
Chrysene	<197	ug/kg	653	197	50	07/04/17 07:11	07/17/17 12:41	218-01-9	
Dibenz(a,h)anthracene	<130	ug/kg	434	130	50	07/04/17 07:11	07/17/17 12:41	53-70-3	
Fluoranthene	<304	ug/kg	1010	304	50	07/04/17 07:11	07/17/17 12:41	206-44-0	
Fluorene	<241	ug/kg	804	241	50	07/04/17 07:11	07/17/17 12:41	86-73-7	
Indeno(1,2,3-cd)pyrene	<128	ug/kg	427	128	50	07/04/17 07:11	07/17/17 12:41	193-39-5	
1-Methylnaphthalene	9330	ug/kg	781	235	50	07/04/17 07:11	07/17/17 12:41	90-12-0	
2-Methylnaphthalene	16900	ug/kg	974	292	50	07/04/17 07:11	07/17/17 12:41	91-57-6	
Naphthalene	6380	ug/kg	1640	491	50	07/04/17 07:11	07/17/17 12:41	91-20-3	
Phenanthrene	<679	ug/kg	2260	679	50	07/04/17 07:11	07/17/17 12:41	85-01-8	
Pyrene	<263	ug/kg	874	263	50	07/04/17 07:11	07/17/17 12:41	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	47	%	19-96		50	07/04/17 07:11	07/17/17 12:41	321-60-8	
Terphenyl-d14 (S)	48	%	31-98		50	07/04/17 07:11	07/17/17 12:41	1718-51-0	
<b>8260 MSV Med Level Normal List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	71-43-2	W
Bromobenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	108-86-1	W
Bromochloromethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	74-97-5	W
Bromodichloromethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-27-4	W
Bromoform	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-25-2	W
Bromomethane	<1400	ug/kg	5000	1400	20	06/29/17 08:15	06/29/17 22:40	74-83-9	W
n-Butylbenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	104-51-8	W
sec-Butylbenzene	933J	ug/kg	1400	584	20	06/29/17 08:15	06/29/17 22:40	135-98-8	
tert-Butylbenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	98-06-6	W
Carbon tetrachloride	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	56-23-5	W
Chlorobenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	108-90-7	W
Chloroethane	<1340	ug/kg	5000	1340	20	06/29/17 08:15	06/29/17 22:40	75-00-3	W
Chloroform	<929	ug/kg	5000	929	20	06/29/17 08:15	06/29/17 22:40	67-66-3	W
Chloromethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	74-87-3	W
2-Chlorotoluene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	95-49-8	W
4-Chlorotoluene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	106-43-4	W
1,2-Dibromo-3-chloropropane	<1820	ug/kg	5000	1820	20	06/29/17 08:15	06/29/17 22:40	96-12-8	W
Dibromochloromethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	124-48-1	W
1,2-Dibromoethane (EDB)	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	106-93-4	W
Dibromomethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	74-95-3	W
1,2-Dichlorobenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	95-50-1	W
1,3-Dichlorobenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	541-73-1	W

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-3, 3 1/2 Lab ID: 40152390003 Collected: 06/22/17 09:00 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,4-Dichlorobenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	106-46-7	W
Dichlorodifluoromethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-71-8	W
1,1-Dichloroethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-34-3	W
1,2-Dichloroethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	107-06-2	W
1,1-Dichloroethene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-35-4	W
cis-1,2-Dichloroethene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	156-59-2	W
trans-1,2-Dichloroethene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	156-60-5	W
1,2-Dichloropropane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	78-87-5	W
1,3-Dichloropropane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	142-28-9	W
2,2-Dichloropropane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	594-20-7	W
1,1-Dichloropropene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	563-58-6	W
cis-1,3-Dichloropropene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	10061-01-5	W
trans-1,3-Dichloropropene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	10061-02-6	W
Diisopropyl ether	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	108-20-3	W
Ethylbenzene	1930	ug/kg	1400	584	20	06/29/17 08:15	06/29/17 22:40	100-41-4	
Hexachloro-1,3-butadiene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	87-68-3	W
Isopropylbenzene (Cumene)	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	98-82-8	W
p-Isopropyltoluene	1880	ug/kg	1400	584	20	06/29/17 08:15	06/29/17 22:40	99-87-6	
Methylene Chloride	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-09-2	W
Methyl-tert-butyl ether	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	1634-04-4	W
Naphthalene	9830	ug/kg	5840	935	20	06/29/17 08:15	06/29/17 22:40	91-20-3	
n-Propylbenzene	1910	ug/kg	1400	584	20	06/29/17 08:15	06/29/17 22:40	103-65-1	
Styrene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	100-42-5	W
1,1,1,2-Tetrachloroethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	630-20-6	W
1,1,2,2-Tetrachloroethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	79-34-5	W
Tetrachloroethene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	127-18-4	W
Toluene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	108-88-3	W
1,2,3-Trichlorobenzene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	87-61-6	W
1,2,4-Trichlorobenzene	<951	ug/kg	5000	951	20	06/29/17 08:15	06/29/17 22:40	120-82-1	W
1,1,1-Trichloroethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	71-55-6	W
1,1,2-Trichloroethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	79-00-5	W
Trichloroethene	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	79-01-6	W
Trichlorofluoromethane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-69-4	W
1,2,3-Trichloropropane	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	96-18-4	W
1,2,4-Trimethylbenzene	153000	ug/kg	1400	584	20	06/29/17 08:15	06/29/17 22:40	95-63-6	
1,3,5-Trimethylbenzene	37800	ug/kg	1400	584	20	06/29/17 08:15	06/29/17 22:40	108-67-8	
Vinyl chloride	<500	ug/kg	1200	500	20	06/29/17 08:15	06/29/17 22:40	75-01-4	W
m&p-Xylene	8240	ug/kg	2800	1170	20	06/29/17 08:15	06/29/17 22:40	179601-23-1	
o-Xylene	1160J	ug/kg	1400	584	20	06/29/17 08:15	06/29/17 22:40	95-47-6	
<b>Surrogates</b>									
Dibromofluoromethane (S)	0	%	68-130		20	06/29/17 08:15	06/29/17 22:40	1868-53-7	S4
Toluene-d8 (S)	0	%	68-149		20	06/29/17 08:15	06/29/17 22:40	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	58-141		20	06/29/17 08:15	06/29/17 22:40	460-00-4	S4

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

**Sample: B-3, 3 1/2** Lab ID: 40152390003 Collected: 06/22/17 09:00 Received: 06/28/17 10:05 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	14.3	%	0.10	0.10	1		07/10/17 13:23		

**Sample: B-4, 7'** Lab ID: 40152390004 Collected: 06/22/17 09:20 Received: 06/28/17 10:05 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	6030	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	71-43-2	
Ethylbenzene	5380	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	100-41-4	
Methyl-tert-butyl ether	51.6J	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	1634-04-4	
Naphthalene	1250	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	91-20-3	
Toluene	7870	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	108-88-3	
1,2,4-Trimethylbenzene	2870	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	95-63-6	
1,3,5-Trimethylbenzene	671	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	108-67-8	
m&p-Xylene	16100	ug/kg	140	58.3	1	06/29/17 07:45	06/29/17 15:32	179601-23-1	
o-Xylene	5890	ug/kg	70.0	29.2	1	06/29/17 07:45	06/29/17 15:32	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103	%	80-120		1	06/29/17 07:45	06/29/17 15:32	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	14.2	%	0.10	0.10	1		07/10/17 13:23		

**Sample: B-5,7'** Lab ID: 40152390005 Collected: 06/22/17 09:30 Received: 06/28/17 10:05 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	89.2	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	71-43-2	
Ethylbenzene	2620	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	100-41-4	
Methyl-tert-butyl ether	44.9J	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	1634-04-4	
Naphthalene	3200	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	91-20-3	
Toluene	95.9	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	108-88-3	
1,2,4-Trimethylbenzene	8380	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	95-63-6	
1,3,5-Trimethylbenzene	503	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	108-67-8	
m&p-Xylene	4010	ug/kg	142	59.2	1	06/29/17 07:45	06/29/17 15:58	179601-23-1	
o-Xylene	119	ug/kg	71.0	29.6	1	06/29/17 07:45	06/29/17 15:58	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1	06/29/17 07:45	06/29/17 15:58	98-08-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-5,7' Lab ID: 40152390005 Collected: 06/22/17 09:30 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	15.5	%	0.10	0.10	1		07/10/17 11:50		

Sample: B-5 Lab ID: 40152390006 Collected: 06/22/17 09:45 Received: 06/28/17 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by HVI</b> Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510									
Acenaphthene	0.24J	ug/L	1.1	0.23	40	06/29/17 08:00	06/30/17 16:13	83-32-9	
Acenaphthylene	<0.19	ug/L	0.93	0.19	40	06/29/17 08:00	06/30/17 16:13	208-96-8	L1
Anthracene	<0.39	ug/L	2.0	0.39	40	06/29/17 08:00	06/30/17 16:13	120-12-7	
Benzo(a)anthracene	<0.28	ug/L	1.4	0.28	40	06/29/17 08:00	06/30/17 16:13	56-55-3	
Benzo(a)pyrene	<0.39	ug/L	2.0	0.39	40	06/29/17 08:00	06/30/17 16:13	50-32-8	
Benzo(b)fluoranthene	<0.21	ug/L	1.1	0.21	40	06/29/17 08:00	06/30/17 16:13	205-99-2	
Benzo(g,h,i)perylene	<0.25	ug/L	1.3	0.25	40	06/29/17 08:00	06/30/17 16:13	191-24-2	
Benzo(k)fluoranthene	<0.28	ug/L	1.4	0.28	40	06/29/17 08:00	06/30/17 16:13	207-08-9	
Chrysene	<0.49	ug/L	2.4	0.49	40	06/29/17 08:00	06/30/17 16:13	218-01-9	
Dibenz(a,h)anthracene	<0.37	ug/L	1.9	0.37	40	06/29/17 08:00	06/30/17 16:13	53-70-3	
Fluoranthene	<0.40	ug/L	2.0	0.40	40	06/29/17 08:00	06/30/17 16:13	206-44-0	
Fluorene	<0.30	ug/L	1.5	0.30	40	06/29/17 08:00	06/30/17 16:13	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.66	ug/L	3.3	0.66	40	06/29/17 08:00	06/30/17 16:13	193-39-5	
1-Methylnaphthalene	60.3	ug/L	1.1	0.22	40	06/29/17 08:00	06/30/17 16:13	90-12-0	
2-Methylnaphthalene	117	ug/L	0.92	0.18	40	06/29/17 08:00	06/30/17 16:13	91-57-6	
Naphthalene	345	ug/L	3.4	0.69	40	06/29/17 08:00	06/30/17 16:13	91-20-3	
Phenanthrene	<0.52	ug/L	2.6	0.52	40	06/29/17 08:00	06/30/17 16:13	85-01-8	
Pyrene	<0.29	ug/L	1.4	0.29	40	06/29/17 08:00	06/30/17 16:13	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	49	%	35-84		40	06/29/17 08:00	06/30/17 16:13	321-60-8	
Terphenyl-d14 (S)	18	%	10-129		40	06/29/17 08:00	06/30/17 16:13	1718-51-0	

8260 MSV Analytical Method: EPA 8260

Benzene	774	ug/L	40.0	20.0	40		06/29/17 19:03	71-43-2	
Bromobenzene	<9.2	ug/L	40.0	9.2	40		06/29/17 19:03	108-86-1	
Bromochloromethane	<13.6	ug/L	40.0	13.6	40		06/29/17 19:03	74-97-5	
Bromodichloromethane	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	75-27-4	
Bromoform	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	75-25-2	
Bromomethane	<97.4	ug/L	200	97.4	40		06/29/17 19:03	74-83-9	
n-Butylbenzene	32.6J	ug/L	40.0	20.0	40		06/29/17 19:03	104-51-8	
sec-Butylbenzene	<87.4	ug/L	200	87.4	40		06/29/17 19:03	135-98-8	
tert-Butylbenzene	<7.2	ug/L	40.0	7.2	40		06/29/17 19:03	98-06-6	
Carbon tetrachloride	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	56-23-5	
Chlorobenzene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	108-90-7	
Chloroethane	<15.0	ug/L	40.0	15.0	40		06/29/17 19:03	75-00-3	
Chloroform	<100	ug/L	200	100	40		06/29/17 19:03	67-66-3	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

**Sample: B-5**      **Lab ID: 40152390006**      Collected: 06/22/17 09:45      Received: 06/28/17 10:05      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
Chloromethane	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	74-87-3	
2-Chlorotoluene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	95-49-8	
4-Chlorotoluene	<8.5	ug/L	40.0	8.5	40		06/29/17 19:03	106-43-4	
1,2-Dibromo-3-chloropropane	<86.6	ug/L	200	86.6	40		06/29/17 19:03	96-12-8	
Dibromochloromethane	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	124-48-1	
1,2-Dibromoethane (EDB)	<7.1	ug/L	40.0	7.1	40		06/29/17 19:03	106-93-4	
Dibromomethane	<17.1	ug/L	40.0	17.1	40		06/29/17 19:03	74-95-3	
1,2-Dichlorobenzene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	95-50-1	
1,3-Dichlorobenzene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	541-73-1	
1,4-Dichlorobenzene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	106-46-7	
Dichlorodifluoromethane	<9.0	ug/L	40.0	9.0	40		06/29/17 19:03	75-71-8	
1,1-Dichloroethane	<9.7	ug/L	40.0	9.7	40		06/29/17 19:03	75-34-3	
1,2-Dichloroethane	<6.7	ug/L	40.0	6.7	40		06/29/17 19:03	107-06-2	
1,1-Dichloroethene	<16.4	ug/L	40.0	16.4	40		06/29/17 19:03	75-35-4	
cis-1,2-Dichloroethene	<10.2	ug/L	40.0	10.2	40		06/29/17 19:03	156-59-2	L1
trans-1,2-Dichloroethene	<10.3	ug/L	40.0	10.3	40		06/29/17 19:03	156-60-5	
1,2-Dichloropropane	<9.3	ug/L	40.0	9.3	40		06/29/17 19:03	78-87-5	
1,3-Dichloropropane	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	142-28-9	
2,2-Dichloropropane	<19.4	ug/L	40.0	19.4	40		06/29/17 19:03	594-20-7	
1,1-Dichloropropene	<17.6	ug/L	40.0	17.6	40		06/29/17 19:03	563-58-6	
cis-1,3-Dichloropropene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	10061-01-5	
trans-1,3-Dichloropropene	<9.2	ug/L	40.0	9.2	40		06/29/17 19:03	10061-02-6	
Diisopropyl ether	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	108-20-3	
Ethylbenzene	1320	ug/L	40.0	20.0	40		06/29/17 19:03	100-41-4	
Hexachloro-1,3-butadiene	<84.2	ug/L	200	84.2	40		06/29/17 19:03	87-68-3	
Isopropylbenzene (Cumene)	66.6	ug/L	40.0	5.7	40		06/29/17 19:03	98-82-8	
p-Isopropyltoluene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	99-87-6	
Methylene Chloride	<9.3	ug/L	40.0	9.3	40		06/29/17 19:03	75-09-2	
Methyl-tert-butyl ether	<7.0	ug/L	40.0	7.0	40		06/29/17 19:03	1634-04-4	
Naphthalene	452	ug/L	200	100	40		06/29/17 19:03	91-20-3	
n-Propylbenzene	177	ug/L	40.0	20.0	40		06/29/17 19:03	103-65-1	
Styrene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	100-42-5	
1,1,1,2-Tetrachloroethane	<7.2	ug/L	40.0	7.2	40		06/29/17 19:03	630-20-6	
1,1,2,2-Tetrachloroethane	<10	ug/L	40.0	10	40		06/29/17 19:03	79-34-5	
Tetrachloroethene	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	127-18-4	
Toluene	123	ug/L	40.0	20.0	40		06/29/17 19:03	108-88-3	
1,2,3-Trichlorobenzene	<85.3	ug/L	200	85.3	40		06/29/17 19:03	87-61-6	
1,2,4-Trichlorobenzene	<88.4	ug/L	200	88.4	40		06/29/17 19:03	120-82-1	
1,1,1-Trichloroethane	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	71-55-6	
1,1,2-Trichloroethane	<7.9	ug/L	40.0	7.9	40		06/29/17 19:03	79-00-5	
Trichloroethene	<13.2	ug/L	40.0	13.2	40		06/29/17 19:03	79-01-6	
Trichlorofluoromethane	<7.4	ug/L	40.0	7.4	40		06/29/17 19:03	75-69-4	
1,2,3-Trichloropropane	<20.0	ug/L	40.0	20.0	40		06/29/17 19:03	96-18-4	
1,2,4-Trimethylbenzene	1650	ug/L	40.0	20.0	40		06/29/17 19:03	95-63-6	
1,3,5-Trimethylbenzene	177	ug/L	40.0	20.0	40		06/29/17 19:03	108-67-8	
Vinyl chloride	<7.0	ug/L	40.0	7.0	40		06/29/17 19:03	75-01-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

**Sample: B-5** Lab ID: 40152390006 Collected: 06/22/17 09:45 Received: 06/28/17 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
m&p-Xylene	1960	ug/L	80.0	40.0	40		06/29/17 19:03	179601-23-1	
o-Xylene	95.3	ug/L	40.0	20.0	40		06/29/17 19:03	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	61-130		40		06/29/17 19:03	460-00-4	
Dibromofluoromethane (S)	98	%	67-130		40		06/29/17 19:03	1868-53-7	
Toluene-d8 (S)	93	%	70-130		40		06/29/17 19:03	2037-26-5	

**Sample: B-6,5'** Lab ID: 40152390007 Collected: 06/22/17 09:55 Received: 06/28/17 10:05 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	540J	ug/kg	660	275	10	06/29/17 07:45	06/29/17 16:49	71-43-2	
Ethylbenzene	19600	ug/kg	660	275	10	06/29/17 07:45	06/29/17 16:49	100-41-4	
Methyl-tert-butyl ether	<250	ug/kg	600	250	10	06/29/17 07:45	06/29/17 16:49	1634-04-4	W
Naphthalene	9300	ug/kg	660	275	10	06/29/17 07:45	06/29/17 16:49	91-20-3	
Toluene	971	ug/kg	660	275	10	06/29/17 07:45	06/29/17 16:49	108-88-3	
1,2,4-Trimethylbenzene	63500	ug/kg	660	275	10	06/29/17 07:45	06/29/17 16:49	95-63-6	
1,3,5-Trimethylbenzene	17500	ug/kg	660	275	10	06/29/17 07:45	06/29/17 16:49	108-67-8	
m&p-Xylene	23100	ug/kg	1320	550	10	06/29/17 07:45	06/29/17 16:49	179601-23-1	
o-Xylene	3150	ug/kg	660	275	10	06/29/17 07:45	06/29/17 16:49	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	137	%	80-120		10	06/29/17 07:45	06/29/17 16:49	98-08-8	S7
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	9.1	%	0.10	0.10	1		07/10/17 11:50		

**Sample: B-7,4'** Lab ID: 40152390008 Collected: 06/22/17 10:15 Received: 06/28/17 10:05 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b> Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	71-43-2	W
Bromobenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	108-86-1	W
Bromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	74-97-5	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/29/17 08:15	06/29/17 22:18	74-83-9	W
n-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	104-51-8	W
sec-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	135-98-8	W
tert-Butylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	98-06-6	W

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-7,4' Lab ID: 40152390008 Collected: 06/22/17 10:15 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/29/17 08:15	06/29/17 22:18	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/29/17 08:15	06/29/17 22:18	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	74-87-3	W
2-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	95-49-8	W
4-Chlorotoluene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	106-43-4	W
1,2-Dibromo-3-chloropropane	<91.2	ug/kg	250	91.2	1	06/29/17 08:15	06/29/17 22:18	96-12-8	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	124-48-1	W
1,2-Dibromoethane (EDB)	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	106-93-4	W
Dibromomethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	74-95-3	W
1,2-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	95-50-1	W
1,3-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	541-73-1	W
1,4-Dichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	106-46-7	W
Dichlorodifluoromethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-71-8	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-34-3	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	107-06-2	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-35-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	156-59-2	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	156-60-5	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	78-87-5	W
1,3-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	142-28-9	W
2,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	594-20-7	W
1,1-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	563-58-6	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	10061-01-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	10061-02-6	W
Diisopropyl ether	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	108-20-3	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	100-41-4	W
Hexachloro-1,3-butadiene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	87-68-3	W
Isopropylbenzene (Cumene)	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	98-82-8	W
p-Isopropyltoluene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	99-87-6	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-09-2	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/29/17 08:15	06/29/17 22:18	91-20-3	W
n-Propylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	103-65-1	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	100-42-5	W
1,1,1,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	630-20-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	79-34-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	108-88-3	W
1,2,3-Trichlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	87-61-6	W
1,2,4-Trichlorobenzene	<47.6	ug/kg	250	47.6	1	06/29/17 08:15	06/29/17 22:18	120-82-1	W
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	71-55-6	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	79-00-5	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	79-01-6	W

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-7,4' Lab ID: 40152390008 Collected: 06/22/17 10:15 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b> Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Trichlorofluoromethane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-69-4	W
1,2,3-Trichloropropane	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	96-18-4	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	108-67-8	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	75-01-4	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/29/17 08:15	06/29/17 22:18	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/29/17 08:15	06/29/17 22:18	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	68-130		1	06/29/17 08:15	06/29/17 22:18	1868-53-7	
Toluene-d8 (S)	106	%	68-149		1	06/29/17 08:15	06/29/17 22:18	2037-26-5	
4-Bromofluorobenzene (S)	92	%	58-141		1	06/29/17 08:15	06/29/17 22:18	460-00-4	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	14.7	%	0.10	0.10	1		07/10/17 11:50		

Sample: B-7,7' Lab ID: 40152390009 Collected: 06/22/17 10:20 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 11:16	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 11:16	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 11:16	1634-04-4	W
Naphthalene	65.8	ug/kg	65.7	27.4	1	06/29/17 07:45	06/29/17 11:16	91-20-3	
Toluene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 11:16	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 11:16	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 11:16	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/29/17 07:45	06/29/17 11:16	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/29/17 07:45	06/29/17 11:16	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1	06/29/17 07:45	06/29/17 11:16	98-08-8	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	8.7	%	0.10	0.10	1		07/10/17 11:50		

Sample: B-8 Lab ID: 40152390010 Collected: 06/22/17 11:00 Received: 06/28/17 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Benzene	23.8	ug/L	1.0	0.40	1		06/29/17 13:33	71-43-2	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-8 Lab ID: 40152390010 Collected: 06/22/17 11:00 Received: 06/28/17 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO									
Ethylbenzene	5.8	ug/L	1.0	0.39	1		06/29/17 13:33	100-41-4	
Methyl-tert-butyl ether	1.9	ug/L	1.0	0.48	1		06/29/17 13:33	1634-04-4	
Toluene	2.1	ug/L	1.0	0.39	1		06/29/17 13:33	108-88-3	
1,2,4-Trimethylbenzene	3.1	ug/L	1.0	0.42	1		06/29/17 13:33	95-63-6	
1,3,5-Trimethylbenzene	1.3	ug/L	1.0	0.42	1		06/29/17 13:33	108-67-8	
m&p-Xylene	13.8	ug/L	2.0	0.80	1		06/29/17 13:33	179601-23-1	
o-Xylene	1.2	ug/L	1.0	0.45	1		06/29/17 13:33	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	106	%	80-120		1		06/29/17 13:33	98-08-8	

<b>8270 MSSV PAH by HVI</b> Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510									
Acenaphthene	<0.0056	ug/L	0.028	0.0056	1	06/29/17 08:00	06/30/17 14:03	83-32-9	
Acenaphthylene	<0.0046	ug/L	0.023	0.0046	1	06/29/17 08:00	06/30/17 14:03	208-96-8	L1
Anthracene	<0.0096	ug/L	0.048	0.0096	1	06/29/17 08:00	06/30/17 14:03	120-12-7	
Benzo(a)anthracene	<0.0069	ug/L	0.035	0.0069	1	06/29/17 08:00	06/30/17 14:03	56-55-3	
Benzo(a)pyrene	<0.0097	ug/L	0.048	0.0097	1	06/29/17 08:00	06/30/17 14:03	50-32-8	
Benzo(b)fluoranthene	<0.0053	ug/L	0.026	0.0053	1	06/29/17 08:00	06/30/17 14:03	205-99-2	
Benzo(g,h,i)perylene	<0.0062	ug/L	0.031	0.0062	1	06/29/17 08:00	06/30/17 14:03	191-24-2	
Benzo(k)fluoranthene	<0.0069	ug/L	0.035	0.0069	1	06/29/17 08:00	06/30/17 14:03	207-08-9	
Chrysene	<0.012	ug/L	0.060	0.012	1	06/29/17 08:00	06/30/17 14:03	218-01-9	
Dibenz(a,h)anthracene	<0.0092	ug/L	0.046	0.0092	1	06/29/17 08:00	06/30/17 14:03	53-70-3	
Fluoranthene	<0.0098	ug/L	0.049	0.0098	1	06/29/17 08:00	06/30/17 14:03	206-44-0	
Fluorene	<0.0073	ug/L	0.037	0.0073	1	06/29/17 08:00	06/30/17 14:03	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.016	ug/L	0.081	0.016	1	06/29/17 08:00	06/30/17 14:03	193-39-5	
1-Methylnaphthalene	0.16	ug/L	0.027	0.0054	1	06/29/17 08:00	06/30/17 14:03	90-12-0	
2-Methylnaphthalene	0.23	ug/L	0.022	0.0045	1	06/29/17 08:00	06/30/17 14:03	91-57-6	
Naphthalene	0.85	ug/L	0.084	0.017	1	06/29/17 08:00	06/30/17 14:03	91-20-3	
Phenanthrene	0.014J	ug/L	0.063	0.013	1	06/29/17 08:00	06/30/17 14:03	85-01-8	
Pyrene	0.0071J	ug/L	0.035	0.0070	1	06/29/17 08:00	06/30/17 14:03	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	64	%	35-84		1	06/29/17 08:00	06/30/17 14:03	321-60-8	
Terphenyl-d14 (S)	36	%	10-129		1	06/29/17 08:00	06/30/17 14:03	1718-51-0	

Sample: B-8 7' Lab ID: 40152390011 Collected: 06/22/17 10:45 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b> Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	5450	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	71-43-2	
Ethylbenzene	1080	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	100-41-4	
Methyl-tert-butyl ether	47.0J	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	1634-04-4	
Naphthalene	103	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	91-20-3	
Toluene	1510	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	108-88-3	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-8 7' Lab ID: 40152390011 Collected: 06/22/17 10:45 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>									
Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
1,2,4-Trimethylbenzene	402	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	95-63-6	
1,3,5-Trimethylbenzene	105	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	108-67-8	
m&p-Xylene	3070	ug/kg	139	57.9	1	06/29/17 07:45	06/29/17 11:42	179601-23-1	
o-Xylene	1110	ug/kg	69.5	29.0	1	06/29/17 07:45	06/29/17 11:42	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1	06/29/17 07:45	06/29/17 11:42	98-08-8	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	13.7	%	0.10	0.10	1		07/10/17 11:50		

Sample: B-9, 4' Lab ID: 40152390012 Collected: 06/22/17 11:30 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>									
Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546									
Acenaphthene	<4.5	ug/kg	15.0	4.5	1	07/04/17 07:11	07/06/17 18:07	83-32-9	
Acenaphthylene	<3.8	ug/kg	12.8	3.8	1	07/04/17 07:11	07/06/17 18:07	208-96-8	
Anthracene	<6.6	ug/kg	22.1	6.6	1	07/04/17 07:11	07/06/17 18:07	120-12-7	
Benzo(a)anthracene	<3.7	ug/kg	12.3	3.7	1	07/04/17 07:11	07/06/17 18:07	56-55-3	
Benzo(a)pyrene	<2.9	ug/kg	9.7	2.9	1	07/04/17 07:11	07/06/17 18:07	50-32-8	
Benzo(b)fluoranthene	<3.3	ug/kg	11.0	3.3	1	07/04/17 07:11	07/06/17 18:07	205-99-2	
Benzo(g,h,i)perylene	<2.4	ug/kg	7.9	2.4	1	07/04/17 07:11	07/06/17 18:07	191-24-2	
Benzo(k)fluoranthene	<2.9	ug/kg	9.7	2.9	1	07/04/17 07:11	07/06/17 18:07	207-08-9	
Chrysene	<3.9	ug/kg	13.0	3.9	1	07/04/17 07:11	07/06/17 18:07	218-01-9	
Dibenz(a,h)anthracene	<2.6	ug/kg	8.7	2.6	1	07/04/17 07:11	07/06/17 18:07	53-70-3	
Fluoranthene	<6.1	ug/kg	20.3	6.1	1	07/04/17 07:11	07/06/17 18:07	206-44-0	
Fluorene	<4.8	ug/kg	16.1	4.8	1	07/04/17 07:11	07/06/17 18:07	86-73-7	
Indeno(1,2,3-cd)pyrene	<2.6	ug/kg	8.5	2.6	1	07/04/17 07:11	07/06/17 18:07	193-39-5	
1-Methylnaphthalene	218	ug/kg	15.6	4.7	1	07/04/17 07:11	07/06/17 18:07	90-12-0	
2-Methylnaphthalene	470	ug/kg	19.4	5.8	1	07/04/17 07:11	07/06/17 18:07	91-57-6	
Naphthalene	656	ug/kg	32.7	9.8	1	07/04/17 07:11	07/06/17 18:07	91-20-3	
Phenanthrene	<13.6	ug/kg	45.2	13.6	1	07/04/17 07:11	07/06/17 18:07	85-01-8	
Pyrene	<5.3	ug/kg	17.5	5.3	1	07/04/17 07:11	07/06/17 18:07	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	3	%	19-96		1	07/04/17 07:11	07/06/17 18:07	321-60-8	1q,S0
Terphenyl-d14 (S)	3	%	31-98		1	07/04/17 07:11	07/06/17 18:07	1718-51-0	1q,S0

8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B

Benzene	11600	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	71-43-2	
Bromobenzene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	108-86-1	W
Bromochloromethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	74-97-5	W
Bromodichloromethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-27-4	W

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: KP VENTURES

Pace Project No.: 40152390

Sample: B-9, 4' Lab ID: 40152390012 Collected: 06/22/17 11:30 Received: 06/28/17 10:05 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
Bromoform	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-25-2	W
Bromomethane	<1750	ug/kg	6250	1750	25	06/29/17 08:15	06/29/17 23:03	74-83-9	W
n-Butylbenzene	14400	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	104-51-8	
sec-Butylbenzene	2380	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	135-98-8	
tert-Butylbenzene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	98-06-6	W
Carbon tetrachloride	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	56-23-5	W
Chlorobenzene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	108-90-7	W
Chloroethane	<1680	ug/kg	6250	1680	25	06/29/17 08:15	06/29/17 23:03	75-00-3	W
Chloroform	1880J	ug/kg	7290	1350	25	06/29/17 08:15	06/29/17 23:03	67-66-3	
Chloromethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	74-87-3	W
2-Chlorotoluene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	95-49-8	W
4-Chlorotoluene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	106-43-4	W
1,2-Dibromo-3-chloropropane	<2280	ug/kg	6250	2280	25	06/29/17 08:15	06/29/17 23:03	96-12-8	W
Dibromochloromethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	124-48-1	W
1,2-Dibromoethane (EDB)	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	106-93-4	W
Dibromomethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	74-95-3	W
1,2-Dichlorobenzene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	95-50-1	W
1,3-Dichlorobenzene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	541-73-1	W
1,4-Dichlorobenzene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	106-46-7	W
Dichlorodifluoromethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-71-8	W
1,1-Dichloroethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-34-3	W
1,2-Dichloroethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	107-06-2	W
1,1-Dichloroethene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-35-4	W
cis-1,2-Dichloroethene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	156-59-2	W
trans-1,2-Dichloroethene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	156-60-5	W
1,2-Dichloropropane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	78-87-5	W
1,3-Dichloropropane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	142-28-9	W
2,2-Dichloropropane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	594-20-7	W
1,1-Dichloropropene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	563-58-6	W
cis-1,3-Dichloropropene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	10061-01-5	W
trans-1,3-Dichloropropene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	10061-02-6	W
Diisopropyl ether	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	108-20-3	W
Ethylbenzene	80700	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	100-41-4	
Hexachloro-1,3-butadiene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	87-68-3	W
Isopropylbenzene (Cumene)	5780	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	98-82-8	
p-Isopropyltoluene	1380J	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	99-87-6	
Methylene Chloride	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-09-2	W
Methyl-tert-butyl ether	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	1634-04-4	W
Naphthalene	25000	ug/kg	7290	1170	25	06/29/17 08:15	06/29/17 23:03	91-20-3	
n-Propylbenzene	28900	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	103-65-1	
Styrene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	100-42-5	W
1,1,1,2-Tetrachloroethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	630-20-6	W
1,1,2,2-Tetrachloroethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	79-34-5	W
Tetrachloroethene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	127-18-4	W
Toluene	251000	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	108-88-3	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: KP VENTURES  
Pace Project No.: 40152390

**Sample: B-9, 4'**      **Lab ID: 40152390012**      Collected: 06/22/17 11:30      Received: 06/28/17 10:05      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Normal List</b>		Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B							
1,2,3-Trichlorobenzene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	87-61-6	W
1,2,4-Trichlorobenzene	<1190	ug/kg	6250	1190	25	06/29/17 08:15	06/29/17 23:03	120-82-1	W
1,1,1-Trichloroethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	71-55-6	W
1,1,2-Trichloroethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	79-00-5	W
Trichloroethene	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	79-01-6	W
Trichlorofluoromethane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-69-4	W
1,2,3-Trichloropropane	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	96-18-4	W
1,2,4-Trimethylbenzene	151000	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	95-63-6	
1,3,5-Trimethylbenzene	43800	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	108-67-8	
Vinyl chloride	<625	ug/kg	1500	625	25	06/29/17 08:15	06/29/17 23:03	75-01-4	W
m&p-Xylene	288000	ug/kg	3500	1460	25	06/29/17 08:15	06/29/17 23:03	179601-23-1	
o-Xylene	105000	ug/kg	1750	729	25	06/29/17 08:15	06/29/17 23:03	95-47-6	
<b>Surrogates</b>									
Dibromofluoromethane (S)	0	%	68-130		25	06/29/17 08:15	06/29/17 23:03	1868-53-7	S4
Toluene-d8 (S)	0	%	68-149		25	06/29/17 08:15	06/29/17 23:03	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	58-141		25	06/29/17 08:15	06/29/17 23:03	460-00-4	S4
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	14.2	%	0.10	0.10	1		07/10/17 11:50		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

QC Batch: 260097 Analysis Method: WI MOD GRO  
 QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV  
 Associated Lab Samples: 40152390001, 40152390002, 40152390004, 40152390005, 40152390007, 40152390009, 40152390011

METHOD BLANK: 1532276 Matrix: Solid  
 Associated Lab Samples: 40152390001, 40152390002, 40152390004, 40152390005, 40152390007, 40152390009, 40152390011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	06/29/17 08:43	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	06/29/17 08:43	
Benzene	ug/kg	<25.0	50.0	06/29/17 08:43	
Ethylbenzene	ug/kg	<25.0	50.0	06/29/17 08:43	
Gasoline Range Organics	mg/kg	<1.6	2.5	06/29/17 08:43	
m&p-Xylene	ug/kg	<50.0	100	06/29/17 08:43	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	06/29/17 08:43	
Naphthalene	ug/kg	<25.0	50.0	06/29/17 08:43	
o-Xylene	ug/kg	<25.0	50.0	06/29/17 08:43	
Toluene	ug/kg	<25.0	50.0	06/29/17 08:43	
a,a,a-Trifluorotoluene (S)	%	106	80-120	06/29/17 08:43	

LABORATORY CONTROL SAMPLE & LCSD: 1532277

1532278

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1030	1030	103	103	80-120	0	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1000	999	100	100	80-120	0	20	
Benzene	ug/kg	1000	988	996	99	100	80-120	1	20	
Ethylbenzene	ug/kg	1000	991	1000	99	100	80-120	1	20	
Gasoline Range Organics	mg/kg	10	10.8	9.8	108	98	80-120	9	20	
m&p-Xylene	ug/kg	2000	1980	2000	99	100	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	998	993	100	99	80-120	1	20	
Naphthalene	ug/kg	1000	1070	1070	107	107	80-120	0	20	
o-Xylene	ug/kg	1000	995	1000	100	100	80-120	1	20	
Toluene	ug/kg	1000	993	1000	99	100	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				109	109	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

QC Batch: 260096	Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO	Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40152390010	

METHOD BLANK: 1532273 Matrix: Water

Associated Lab Samples: 40152390010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.42	1.0	06/29/17 08:42	
1,3,5-Trimethylbenzene	ug/L	<0.42	1.0	06/29/17 08:42	
Benzene	ug/L	<0.40	1.0	06/29/17 08:42	
Ethylbenzene	ug/L	<0.39	1.0	06/29/17 08:42	
m&p-Xylene	ug/L	<0.80	2.0	06/29/17 08:42	
Methyl-tert-butyl ether	ug/L	<0.48	1.0	06/29/17 08:42	
o-Xylene	ug/L	<0.45	1.0	06/29/17 08:42	
Toluene	ug/L	<0.39	1.0	06/29/17 08:42	
a,a,a-Trifluorotoluene (S)	%	106	80-120	06/29/17 08:42	

LABORATORY CONTROL SAMPLE & LCSD: 1532274 1532275

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	18.3	18.4	92	92	80-120	0	20	
1,3,5-Trimethylbenzene	ug/L	20	17.6	17.5	88	88	80-120	0	20	
Benzene	ug/L	20	21.3	21.1	107	105	80-120	1	20	
Ethylbenzene	ug/L	20	20.7	20.5	104	102	80-120	1	20	
m&p-Xylene	ug/L	40	39.8	39.4	100	98	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	20.1	19.8	100	99	80-120	1	20	
o-Xylene	ug/L	20	20.0	20.0	100	100	80-120	0	20	
Toluene	ug/L	20	20.4	20.5	102	102	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				105	108	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1533092 1533093

Parameter	Units	40152396009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	608	200	200	794	797	93	95	11-200	0	20	
1,3,5-Trimethylbenzene	ug/L	183	200	200	353	357	85	87	54-142	1	20	
Benzene	ug/L	892	200	200	1100	1110	107	108	66-140	0	20	
Ethylbenzene	ug/L	788	200	200	1000	1010	107	109	66-143	0	20	
m&p-Xylene	ug/L	1370	400	400	1770	1780	100	102	60-141	0	20	
Methyl-tert-butyl ether	ug/L	<4.8	200	200	179	180	89	90	70-129	1	20	
o-Xylene	ug/L	281	200	200	476	472	98	96	68-132	1	20	
Toluene	ug/L	2010	200	200	2260	2270	125	127	76-130	0	20	
a,a,a-Trifluorotoluene (S)	%						105	106	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: KP VENTURES

Pace Project No.: 40152390

QC Batch: 260168 Analysis Method: EPA 8260  
 QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List  
 Associated Lab Samples: 40152390003, 40152390008, 40152390012

METHOD BLANK: 1532701 Matrix: Solid

Associated Lab Samples: 40152390003, 40152390008, 40152390012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	06/29/17 14:22	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	06/29/17 14:22	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	06/29/17 14:22	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	06/29/17 14:22	
1,1-Dichloroethane	ug/kg	<17.6	50.0	06/29/17 14:22	
1,1-Dichloroethene	ug/kg	<17.6	50.0	06/29/17 14:22	
1,1-Dichloropropene	ug/kg	<14.0	50.0	06/29/17 14:22	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	06/29/17 14:22	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	06/29/17 14:22	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	06/29/17 14:22	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	06/29/17 14:22	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	06/29/17 14:22	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	06/29/17 14:22	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	06/29/17 14:22	
1,2-Dichloroethane	ug/kg	<15.0	50.0	06/29/17 14:22	
1,2-Dichloropropane	ug/kg	<16.8	50.0	06/29/17 14:22	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	06/29/17 14:22	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	06/29/17 14:22	
1,3-Dichloropropane	ug/kg	<12.0	50.0	06/29/17 14:22	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	06/29/17 14:22	
2,2-Dichloropropane	ug/kg	<12.6	50.0	06/29/17 14:22	
2-Chlorotoluene	ug/kg	<15.8	50.0	06/29/17 14:22	
4-Chlorotoluene	ug/kg	<13.0	50.0	06/29/17 14:22	
Benzene	ug/kg	<9.2	20.0	06/29/17 14:22	
Bromobenzene	ug/kg	<20.6	50.0	06/29/17 14:22	
Bromochloromethane	ug/kg	<21.4	50.0	06/29/17 14:22	
Bromodichloromethane	ug/kg	<9.8	50.0	06/29/17 14:22	
Bromoform	ug/kg	<19.8	50.0	06/29/17 14:22	
Bromomethane	ug/kg	<69.9	250	06/29/17 14:22	
Carbon tetrachloride	ug/kg	<12.1	50.0	06/29/17 14:22	
Chlorobenzene	ug/kg	<14.8	50.0	06/29/17 14:22	
Chloroethane	ug/kg	<67.0	250	06/29/17 14:22	
Chloroform	ug/kg	<46.4	250	06/29/17 14:22	
Chloromethane	ug/kg	<20.4	50.0	06/29/17 14:22	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	06/29/17 14:22	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	06/29/17 14:22	
Dibromochloromethane	ug/kg	<17.9	50.0	06/29/17 14:22	
Dibromomethane	ug/kg	<19.3	50.0	06/29/17 14:22	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	06/29/17 14:22	
Diisopropyl ether	ug/kg	<17.7	50.0	06/29/17 14:22	
Ethylbenzene	ug/kg	<12.4	50.0	06/29/17 14:22	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

METHOD BLANK: 1532701

Matrix: Solid

Associated Lab Samples: 40152390003, 40152390008, 40152390012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	26.6J	50.0	06/29/17 14:22	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	06/29/17 14:22	
m&p-Xylene	ug/kg	<34.4	100	06/29/17 14:22	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	06/29/17 14:22	
Methylene Chloride	ug/kg	<16.2	50.0	06/29/17 14:22	
n-Butylbenzene	ug/kg	<10.5	50.0	06/29/17 14:22	
n-Propylbenzene	ug/kg	<11.6	50.0	06/29/17 14:22	
Naphthalene	ug/kg	<40.0	250	06/29/17 14:22	
o-Xylene	ug/kg	<14.0	50.0	06/29/17 14:22	
p-Isopropyltoluene	ug/kg	<12.0	50.0	06/29/17 14:22	
sec-Butylbenzene	ug/kg	<11.9	50.0	06/29/17 14:22	
Styrene	ug/kg	<9.0	50.0	06/29/17 14:22	
tert-Butylbenzene	ug/kg	<9.5	50.0	06/29/17 14:22	
Tetrachloroethene	ug/kg	<12.9	50.0	06/29/17 14:22	
Toluene	ug/kg	<11.2	50.0	06/29/17 14:22	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	06/29/17 14:22	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	06/29/17 14:22	
Trichloroethene	ug/kg	<23.6	50.0	06/29/17 14:22	
Trichlorofluoromethane	ug/kg	<24.7	50.0	06/29/17 14:22	
Vinyl chloride	ug/kg	<21.1	50.0	06/29/17 14:22	
4-Bromofluorobenzene (S)	%	90	58-141	06/29/17 14:22	
Dibromofluoromethane (S)	%	102	68-130	06/29/17 14:22	
Toluene-d8 (S)	%	105	68-149	06/29/17 14:22	

LABORATORY CONTROL SAMPLE: 1532702

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2510	100	61-122	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2670	107	73-130	
1,1,2-Trichloroethane	ug/kg	2500	2640	106	70-130	
1,1-Dichloroethane	ug/kg	2500	2350	94	63-124	
1,1-Dichloroethene	ug/kg	2500	2620	105	53-117	
1,2,4-Trichlorobenzene	ug/kg	2500	2350	94	78-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2100	84	49-140	
1,2-Dibromoethane (EDB)	ug/kg	2500	2610	104	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2680	107	70-130	
1,2-Dichloroethane	ug/kg	2500	2920	117	56-135	
1,2-Dichloropropane	ug/kg	2500	2450	98	77-122	
1,3-Dichlorobenzene	ug/kg	2500	2650	106	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2620	105	70-130	
Benzene	ug/kg	2500	2340	94	66-130	
Bromodichloromethane	ug/kg	2500	2500	100	62-135	
Bromoform	ug/kg	2500	2210	88	68-130	
Bromomethane	ug/kg	2500	2290	92	29-137	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

LABORATORY CONTROL SAMPLE: 1532702

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2450	98	57-130	
Chlorobenzene	ug/kg	2500	2630	105	70-130	
Chloroethane	ug/kg	2500	2710	108	36-144	
Chloroform	ug/kg	2500	2540	102	69-115	
Chloromethane	ug/kg	2500	1660	66	32-126	
cis-1,2-Dichloroethene	ug/kg	2500	2170	87	65-130	
cis-1,3-Dichloropropene	ug/kg	2500	2380	95	70-130	
Dibromochloromethane	ug/kg	2500	2340	93	70-130	
Dichlorodifluoromethane	ug/kg	2500	1370	55	10-99	
Ethylbenzene	ug/kg	2500	2600	104	82-122	
Isopropylbenzene (Cumene)	ug/kg	2500	2520	101	70-130	
m&p-Xylene	ug/kg	5000	5080	102	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2340	94	63-134	
Methylene Chloride	ug/kg	2500	2850	114	56-123	
o-Xylene	ug/kg	2500	2490	100	70-130	
Styrene	ug/kg	2500	2530	101	70-130	
Tetrachloroethene	ug/kg	2500	2520	101	70-131	
Toluene	ug/kg	2500	2580	103	80-120	
trans-1,2-Dichloroethene	ug/kg	2500	2400	96	66-130	
trans-1,3-Dichloropropene	ug/kg	2500	2380	95	68-130	
Trichloroethene	ug/kg	2500	2590	104	70-130	
Trichlorofluoromethane	ug/kg	2500	3160	126	37-149	
Vinyl chloride	ug/kg	2500	2000	80	43-128	
4-Bromofluorobenzene (S)	%			96	58-141	
Dibromofluoromethane (S)	%			99	68-130	
Toluene-d8 (S)	%			102	68-149	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1532703 1532704

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40152310014 Result	Spike Conc.	Spike Conc.	MS Result							
1,1,1-Trichloroethane	ug/kg	<25.0	1420	1420	1210	1270	85	89	57-123	5	20	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1420	1420	1500	1460	105	102	73-135	3	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1420	1420	1470	1450	103	102	70-130	1	20	
1,1-Dichloroethane	ug/kg	<25.0	1420	1420	1210	1250	85	87	63-124	3	20	
1,1-Dichloroethene	ug/kg	<25.0	1420	1420	1260	1310	89	92	48-117	4	23	
1,2,4-Trichlorobenzene	ug/kg	<47.6	1420	1420	1500	1490	103	102	78-145	1	20	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1420	1420	1240	1240	87	87	38-168	0	22	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1420	1420	1400	1410	98	99	70-130	1	20	
1,2-Dichlorobenzene	ug/kg	<25.0	1420	1420	1530	1560	107	109	70-130	2	20	
1,2-Dichloroethane	ug/kg	<25.0	1420	1420	1640	1610	115	113	56-145	2	20	
1,2-Dichloropropane	ug/kg	<25.0	1420	1420	1350	1320	95	93	77-123	2	20	
1,3-Dichlorobenzene	ug/kg	<25.0	1420	1420	1510	1500	106	105	70-130	1	20	
1,4-Dichlorobenzene	ug/kg	<25.0	1420	1420	1510	1520	105	106	70-130	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

Parameter	Units	40152310014		1532703		1532704		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Benzene	ug/kg	<25.0	1420	1420	1260	1280	89	90	65-130	2	20		
Bromodichloromethane	ug/kg	<25.0	1420	1420	1370	1320	96	93	59-141	4	20		
Bromoform	ug/kg	<25.0	1420	1420	1180	1120	83	79	59-141	5	20		
Bromomethane	ug/kg	<69.9	1420	1420	1220	1310	86	92	28-139	7	20		
Carbon tetrachloride	ug/kg	<25.0	1420	1420	1180	1240	82	87	50-130	5	20		
Chlorobenzene	ug/kg	<25.0	1420	1420	1440	1470	101	103	70-130	2	20		
Chloroethane	ug/kg	<67.0	1420	1420	1380	1530	97	107	36-144	10	20		
Chloroform	ug/kg	<46.4	1420	1420	1380	1410	97	99	68-122	2	20		
Chloromethane	ug/kg	<25.0	1420	1420	757	804	53	56	30-126	6	20		
cis-1,2-Dichloroethene	ug/kg	<25.0	1420	1420	1240	1190	87	84	63-130	4	20		
cis-1,3-Dichloropropene	ug/kg	<25.0	1420	1420	1260	1230	88	86	70-130	2	20		
Dibromochloromethane	ug/kg	<25.0	1420	1420	1200	1220	84	86	66-136	1	20		
Dichlorodifluoromethane	ug/kg	<25.0	1420	1420	454	473	32	33	10-99	4	33		
Ethylbenzene	ug/kg	<25.0	1420	1420	1340	1340	94	94	80-122	0	20		
Isopropylbenzene (Cumene)	ug/kg	<25.0	1420	1420	1270	1280	89	90	70-130	1	20		
m&p-Xylene	ug/kg	<50.0	2850	2850	2670	2620	94	92	70-130	2	20		
Methyl-tert-butyl ether	ug/kg	<25.0	1420	1420	1360	1310	96	92	63-134	4	20		
Methylene Chloride	ug/kg	<25.0	1420	1420	1550	1570	108	110	56-127	1	20		
o-Xylene	ug/kg	<25.0	1420	1420	1350	1320	95	93	70-130	2	20		
Styrene	ug/kg	<25.0	1420	1420	1350	1320	95	93	70-130	2	20		
Tetrachloroethene	ug/kg	<25.0	1420	1420	1360	1390	95	98	70-131	2	20		
Toluene	ug/kg	<25.0	1420	1420	1380	1390	97	97	80-120	0	20		
trans-1,2-Dichloroethene	ug/kg	<25.0	1420	1420	1210	1230	85	86	60-130	1	20		
trans-1,3-Dichloropropene	ug/kg	<25.0	1420	1420	1290	1240	90	87	68-130	4	20		
Trichloroethene	ug/kg	<25.0	1420	1420	1350	1380	95	97	70-130	2	20		
Trichlorofluoromethane	ug/kg	<25.0	1420	1420	1410	1320	99	93	37-149	7	24		
Vinyl chloride	ug/kg	<25.0	1420	1420	913	943	64	66	39-128	3	20		
4-Bromofluorobenzene (S)	%						83	80	58-141				
Dibromofluoromethane (S)	%						86	84	68-130				
Toluene-d8 (S)	%						90	87	68-149				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

QC Batch: 260080	Analysis Method: EPA 8260
QC Batch Method: EPA 8260	Analysis Description: 8260 MSV
Associated Lab Samples: 40152390006	

METHOD BLANK: 1532218 Matrix: Water

Associated Lab Samples: 40152390006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	06/29/17 14:56	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	06/29/17 14:56	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	06/29/17 14:56	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	06/29/17 14:56	
1,1-Dichloroethane	ug/L	<0.24	1.0	06/29/17 14:56	
1,1-Dichloroethene	ug/L	<0.41	1.0	06/29/17 14:56	
1,1-Dichloropropene	ug/L	<0.44	1.0	06/29/17 14:56	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	06/29/17 14:56	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	06/29/17 14:56	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	06/29/17 14:56	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	06/29/17 14:56	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	06/29/17 14:56	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	06/29/17 14:56	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	06/29/17 14:56	
1,2-Dichloroethane	ug/L	<0.17	1.0	06/29/17 14:56	
1,2-Dichloropropane	ug/L	<0.23	1.0	06/29/17 14:56	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	06/29/17 14:56	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	06/29/17 14:56	
1,3-Dichloropropane	ug/L	<0.50	1.0	06/29/17 14:56	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	06/29/17 14:56	
2,2-Dichloropropane	ug/L	<0.48	1.0	06/29/17 14:56	
2-Chlorotoluene	ug/L	<0.50	1.0	06/29/17 14:56	
4-Chlorotoluene	ug/L	<0.21	1.0	06/29/17 14:56	
Benzene	ug/L	<0.50	1.0	06/29/17 14:56	
Bromobenzene	ug/L	<0.23	1.0	06/29/17 14:56	
Bromochloromethane	ug/L	<0.34	1.0	06/29/17 14:56	
Bromodichloromethane	ug/L	<0.50	1.0	06/29/17 14:56	
Bromoform	ug/L	<0.50	1.0	06/29/17 14:56	
Bromomethane	ug/L	<2.4	5.0	06/29/17 14:56	
Carbon tetrachloride	ug/L	<0.50	1.0	06/29/17 14:56	
Chlorobenzene	ug/L	<0.50	1.0	06/29/17 14:56	
Chloroethane	ug/L	<0.37	1.0	06/29/17 14:56	
Chloroform	ug/L	<2.5	5.0	06/29/17 14:56	
Chloromethane	ug/L	<0.50	1.0	06/29/17 14:56	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	06/29/17 14:56	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	06/29/17 14:56	
Dibromochloromethane	ug/L	<0.50	1.0	06/29/17 14:56	
Dibromomethane	ug/L	<0.43	1.0	06/29/17 14:56	
Dichlorodifluoromethane	ug/L	<0.22	1.0	06/29/17 14:56	
Diisopropyl ether	ug/L	<0.50	1.0	06/29/17 14:56	
Ethylbenzene	ug/L	<0.50	1.0	06/29/17 14:56	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

METHOD BLANK: 1532218

Matrix: Water

Associated Lab Samples: 40152390006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	06/29/17 14:56	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	06/29/17 14:56	
m&p-Xylene	ug/L	<1.0	2.0	06/29/17 14:56	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	06/29/17 14:56	
Methylene Chloride	ug/L	<0.23	1.0	06/29/17 14:56	
n-Butylbenzene	ug/L	<0.50	1.0	06/29/17 14:56	
n-Propylbenzene	ug/L	<0.50	1.0	06/29/17 14:56	
Naphthalene	ug/L	<2.5	5.0	06/29/17 14:56	
o-Xylene	ug/L	<0.50	1.0	06/29/17 14:56	
p-Isopropyltoluene	ug/L	<0.50	1.0	06/29/17 14:56	
sec-Butylbenzene	ug/L	<2.2	5.0	06/29/17 14:56	
Styrene	ug/L	<0.50	1.0	06/29/17 14:56	
tert-Butylbenzene	ug/L	<0.18	1.0	06/29/17 14:56	
Tetrachloroethene	ug/L	<0.50	1.0	06/29/17 14:56	
Toluene	ug/L	<0.50	1.0	06/29/17 14:56	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	06/29/17 14:56	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	06/29/17 14:56	
Trichloroethene	ug/L	<0.33	1.0	06/29/17 14:56	
Trichlorofluoromethane	ug/L	<0.18	1.0	06/29/17 14:56	
Vinyl chloride	ug/L	<0.18	1.0	06/29/17 14:56	
4-Bromofluorobenzene (S)	%	97	61-130	06/29/17 14:56	
Dibromofluoromethane (S)	%	105	67-130	06/29/17 14:56	
Toluene-d8 (S)	%	93	70-130	06/29/17 14:56	

LABORATORY CONTROL SAMPLE: 1532219

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	63.0	126	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	43.7	87	70-130	
1,1,2-Trichloroethane	ug/L	50	49.7	99	70-130	
1,1-Dichloroethane	ug/L	50	51.2	102	71-132	
1,1-Dichloroethene	ug/L	50	53.3	107	75-130	
1,2,4-Trichlorobenzene	ug/L	50	45.8	92	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	47.2	94	63-123	
1,2-Dibromoethane (EDB)	ug/L	50	52.4	105	70-130	
1,2-Dichlorobenzene	ug/L	50	51.4	103	70-130	
1,2-Dichloroethane	ug/L	50	56.6	113	70-131	
1,2-Dichloropropane	ug/L	50	51.0	102	80-120	
1,3-Dichlorobenzene	ug/L	50	51.0	102	70-130	
1,4-Dichlorobenzene	ug/L	50	52.4	105	70-130	
Benzene	ug/L	50	49.7	99	73-145	
Bromodichloromethane	ug/L	50	59.9	120	70-130	
Bromoform	ug/L	50	55.2	110	67-130	
Bromomethane	ug/L	50	35.0	70	26-128	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

LABORATORY CONTROL SAMPLE: 1532219

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	64.2	128	70-133	
Chlorobenzene	ug/L	50	53.8	108	70-130	
Chloroethane	ug/L	50	48.7	97	58-120	
Chloroform	ug/L	50	55.7	111	80-121	
Chloromethane	ug/L	50	32.8	66	40-127	
cis-1,2-Dichloroethene	ug/L	50	67.2	134	70-130	L1
cis-1,3-Dichloropropene	ug/L	50	45.4	91	70-130	
Dibromochloromethane	ug/L	50	54.6	109	70-130	
Dichlorodifluoromethane	ug/L	50	38.8	78	20-135	
Ethylbenzene	ug/L	50	52.3	105	87-129	
Isopropylbenzene (Cumene)	ug/L	50	54.2	108	70-130	
m&p-Xylene	ug/L	100	109	109	70-130	
Methyl-tert-butyl ether	ug/L	50	53.0	106	66-143	
Methylene Chloride	ug/L	50	52.6	105	70-130	
o-Xylene	ug/L	50	53.7	107	70-130	
Styrene	ug/L	50	53.2	106	70-130	
Tetrachloroethene	ug/L	50	56.2	112	70-130	
Toluene	ug/L	50	51.5	103	82-130	
trans-1,2-Dichloroethene	ug/L	50	55.1	110	75-132	
trans-1,3-Dichloropropene	ug/L	50	44.1	88	70-130	
Trichloroethene	ug/L	50	58.1	116	70-130	
Trichlorofluoromethane	ug/L	50	65.2	130	76-133	
Vinyl chloride	ug/L	50	44.8	90	57-136	
4-Bromofluorobenzene (S)	%			100	61-130	
Dibromofluoromethane (S)	%			106	67-130	
Toluene-d8 (S)	%			92	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1532306 1532307

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40152189010 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
1,1,1-Trichloroethane	ug/L	<0.50	50	50	62.4	59.9	125	120	70-134	4	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	44.1	43.6	88	87	70-130	1	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	49.2	48.1	98	96	70-130	2	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	50.5	48.7	101	97	71-133	4	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	53.0	51.4	106	103	75-136	3	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	46.7	45.7	93	91	70-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	47.0	45.8	94	92	63-123	3	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	52.4	51.3	105	103	70-130	2	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	51.4	49.9	103	100	70-130	3	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	54.9	53.7	110	107	70-131	2	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	49.8	48.2	100	96	80-120	3	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	51.0	49.7	102	99	70-130	2	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	52.2	50.8	104	102	70-130	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

Parameter	Units	1532306		1532307		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40152189010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Benzene	ug/L	<0.50	50	50	49.4	47.3	99	95	73-145	4	20	
Bromodichloromethane	ug/L	<0.50	50	50	59.6	56.7	119	113	70-130	5	20	
Bromoform	ug/L	<0.50	50	50	54.5	53.3	109	107	67-130	2	20	
Bromomethane	ug/L	<2.4	50	50	41.6	42.5	83	85	26-129	2	20	
Carbon tetrachloride	ug/L	<0.50	50	50	63.8	60.8	128	122	70-134	5	20	
Chlorobenzene	ug/L	<0.50	50	50	53.5	51.3	107	103	70-130	4	20	
Chloroethane	ug/L	<0.37	50	50	49.2	46.2	98	92	58-120	6	20	
Chloroform	ug/L	<2.5	50	50	54.9	52.8	110	106	80-121	4	20	
Chloromethane	ug/L	<0.50	50	50	35.9	34.4	72	69	40-128	4	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	66.4	63.7	133	127	70-130	4	20	MO
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	45.4	43.5	91	87	70-130	4	20	
Dibromochloromethane	ug/L	<0.50	50	50	53.8	53.1	108	106	70-130	1	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	47.7	44.8	95	90	20-146	6	20	
Ethylbenzene	ug/L	<0.50	50	50	51.3	49.4	103	99	87-129	4	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	53.0	51.1	106	102	70-130	4	20	
m&p-Xylene	ug/L	<1.0	100	100	107	104	107	104	70-130	3	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	52.4	51.0	105	102	66-143	3	20	
Methylene Chloride	ug/L	<0.23	50	50	52.1	50.7	104	101	70-130	3	20	
o-Xylene	ug/L	<0.50	50	50	52.6	51.1	105	102	70-130	3	20	
Styrene	ug/L	<0.50	50	50	52.2	50.6	104	101	70-130	3	20	
Tetrachloroethene	ug/L	<0.50	50	50	56.1	52.7	112	105	70-130	6	20	
Toluene	ug/L	<0.50	50	50	50.6	49.0	101	98	82-131	3	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	55.2	53.4	110	107	75-135	3	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	44.4	43.8	89	88	70-130	1	20	
Trichloroethene	ug/L	<0.33	50	50	57.7	54.7	115	109	70-130	5	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	66.1	62.7	132	125	76-150	5	20	
Vinyl chloride	ug/L	<0.18	50	50	47.7	45.2	95	90	56-143	5	20	
4-Bromofluorobenzene (S)	%						100	100	61-130			
Dibromofluoromethane (S)	%						104	104	67-130			
Toluene-d8 (S)	%						92	92	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

QC Batch: 260499 Analysis Method: EPA 8270 by SIM  
QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM  
Associated Lab Samples: 40152390001, 40152390002, 40152390003, 40152390012

METHOD BLANK: 1534925 Matrix: Solid  
Associated Lab Samples: 40152390001, 40152390002, 40152390003, 40152390012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<4.0	13.4	07/05/17 14:31	
2-Methylnaphthalene	ug/kg	<5.0	16.7	07/05/17 14:31	
Acenaphthene	ug/kg	<3.9	12.9	07/05/17 14:31	
Acenaphthylene	ug/kg	<3.3	11.0	07/05/17 14:31	
Anthracene	ug/kg	<5.7	19.0	07/05/17 14:31	
Benzo(a)anthracene	ug/kg	<3.2	10.6	07/05/17 14:31	
Benzo(a)pyrene	ug/kg	<2.5	8.4	07/05/17 14:31	
Benzo(b)fluoranthene	ug/kg	<2.8	9.4	07/05/17 14:31	
Benzo(g,h,i)perylene	ug/kg	<2.0	6.8	07/05/17 14:31	
Benzo(k)fluoranthene	ug/kg	<2.5	8.4	07/05/17 14:31	
Chrysene	ug/kg	<3.4	11.2	07/05/17 14:31	
Dibenz(a,h)anthracene	ug/kg	<2.2	7.4	07/05/17 14:31	
Fluoranthene	ug/kg	<5.2	17.4	07/05/17 14:31	
Fluorene	ug/kg	<4.1	13.8	07/05/17 14:31	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.2	7.3	07/05/17 14:31	
Naphthalene	ug/kg	<8.4	28.1	07/05/17 14:31	
Phenanthrene	ug/kg	<11.6	38.8	07/05/17 14:31	
Pyrene	ug/kg	<4.5	15.0	07/05/17 14:31	
2-Fluorobiphenyl (S)	%	61	19-96	07/05/17 14:31	
Terphenyl-d14 (S)	%	76	31-98	07/05/17 14:31	

LABORATORY CONTROL SAMPLE: 1534926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	334	232	69	49-102	
2-Methylnaphthalene	ug/kg	334	228	68	47-91	
Acenaphthene	ug/kg	334	250	75	52-97	
Acenaphthylene	ug/kg	334	245	73	49-97	
Anthracene	ug/kg	334	264	79	62-101	
Benzo(a)anthracene	ug/kg	334	244	73	53-95	
Benzo(a)pyrene	ug/kg	334	267	80	57-108	
Benzo(b)fluoranthene	ug/kg	334	261	78	53-113	
Benzo(g,h,i)perylene	ug/kg	334	244	73	43-114	
Benzo(k)fluoranthene	ug/kg	334	280	84	66-116	
Chrysene	ug/kg	334	265	79	64-109	
Dibenz(a,h)anthracene	ug/kg	334	263	79	50-105	
Fluoranthene	ug/kg	334	256	77	58-107	
Fluorene	ug/kg	334	249	75	52-99	
Indeno(1,2,3-cd)pyrene	ug/kg	334	251	75	51-113	
Naphthalene	ug/kg	334	230	69	50-91	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

LABORATORY CONTROL SAMPLE: 1534926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/kg	334	255	76	57-101	
Pyrene	ug/kg	334	246	74	50-102	
2-Fluorobiphenyl (S)	%			67	19-96	
Terphenyl-d14 (S)	%			77	31-98	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1534927 1534928

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40152390002 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
1-Methylnaphthalene	ug/kg	<4.6	378	379	157	218	41	57	37-102	33	29	R1
2-Methylnaphthalene	ug/kg	<5.7	378	379	156	218	41	57	44-91	33	36	M1
Acenaphthene	ug/kg	<4.4	378	379	190	248	50	65	46-97	26	26	
Acenaphthylene	ug/kg	<3.7	378	379	185	242	49	64	47-97	27	29	
Anthracene	ug/kg	<6.5	378	379	207	244	55	64	50-101	16	28	
Benzo(a)anthracene	ug/kg	<3.6	378	379	201	227	52	59	48-95	12	28	
Benzo(a)pyrene	ug/kg	<2.9	378	379	203	233	54	61	47-108	14	36	
Benzo(b)fluoranthene	ug/kg	<3.2	378	379	200	228	53	60	42-113	13	34	
Benzo(g,h,i)perylene	ug/kg	<2.3	378	379	211	241	56	63	18-114	13	30	
Benzo(k)fluoranthene	ug/kg	<2.8	378	379	215	249	57	66	50-116	15	27	
Chrysene	ug/kg	<3.8	378	379	204	232	54	61	55-109	13	28	M1
Dibenz(a,h)anthracene	ug/kg	<2.5	378	379	201	230	53	61	39-105	13	29	
Fluoranthene	ug/kg	<5.9	378	379	198	229	52	60	41-107	14	28	
Fluorene	ug/kg	<4.7	378	379	190	237	50	62	48-99	22	28	
Indeno(1,2,3-cd)pyrene	ug/kg	<2.5	378	379	199	228	53	60	27-113	14	30	
Naphthalene	ug/kg	<9.6	378	379	172	238	45	62	40-91	33	37	
Phenanthrene	ug/kg	<13.2	378	379	197	234	52	62	46-101	17	40	
Pyrene	ug/kg	<5.1	378	379	201	231	53	61	50-102	14	31	
2-Fluorobiphenyl (S)	%						42	58	19-96			
Terphenyl-d14 (S)	%						52	61	31-98			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: KP VENTURES

Pace Project No.: 40152390

QC Batch: 260101

Analysis Method: EPA 8270 by HVI

QC Batch Method: EPA 3510

Analysis Description: 8270 Water PAH by HVI

Associated Lab Samples: 40152390006, 40152390010

METHOD BLANK: 1532292

Matrix: Water

Associated Lab Samples: 40152390006, 40152390010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0059	0.030	06/29/17 11:04	
2-Methylnaphthalene	ug/L	<0.0049	0.024	06/29/17 11:04	
Acenaphthene	ug/L	<0.0061	0.030	06/29/17 11:04	
Acenaphthylene	ug/L	<0.0050	0.025	06/29/17 11:04	
Anthracene	ug/L	<0.010	0.052	06/29/17 11:04	
Benzo(a)anthracene	ug/L	<0.0076	0.038	06/29/17 11:04	
Benzo(a)pyrene	ug/L	<0.011	0.053	06/29/17 11:04	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	06/29/17 11:04	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	06/29/17 11:04	
Benzo(k)fluoranthene	ug/L	<0.0076	0.038	06/29/17 11:04	
Chrysene	ug/L	<0.013	0.065	06/29/17 11:04	
Dibenz(a,h)anthracene	ug/L	<0.010	0.050	06/29/17 11:04	
Fluoranthene	ug/L	<0.011	0.053	06/29/17 11:04	
Fluorene	ug/L	<0.0080	0.040	06/29/17 11:04	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	0.088	06/29/17 11:04	
Naphthalene	ug/L	<0.018	0.092	06/29/17 11:04	
Phenanthrene	ug/L	<0.014	0.069	06/29/17 11:04	
Pyrene	ug/L	<0.0076	0.038	06/29/17 11:04	
2-Fluorobiphenyl (S)	%	78	35-84	06/29/17 11:04	
Terphenyl-d14 (S)	%	91	10-129	06/29/17 11:04	

LABORATORY CONTROL SAMPLE & LCSD: 1532293

1532294

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1-Methylnaphthalene	ug/L	2	1.6	1.4	82	72	39-83	13	29	
2-Methylnaphthalene	ug/L	2	1.7	1.5	84	74	38-86	13	32	
Acenaphthene	ug/L	2	1.7	1.5	83	74	35-85	11	27	
Acenaphthylene	ug/L	2	1.8	1.6	91	81	31-88	12	29 L1	
Anthracene	ug/L	2	1.7	1.7	84	84	47-104	0	25	
Benzo(a)anthracene	ug/L	2	1.5	1.5	75	75	36-105	0	20	
Benzo(a)pyrene	ug/L	2	2.1	2.1	104	105	69-117	2	20	
Benzo(b)fluoranthene	ug/L	2	1.8	1.8	89	89	54-107	0	22	
Benzo(g,h,i)perylene	ug/L	2	1.1	1.1	57	57	13-86	2	33	
Benzo(k)fluoranthene	ug/L	2	2.0	2.1	102	104	63-128	2	20	
Chrysene	ug/L	2	2.2	2.2	109	108	69-150	1	20	
Dibenz(a,h)anthracene	ug/L	2	0.87	0.84	43	42	10-87	4	37	
Fluoranthene	ug/L	2	1.9	2.0	97	101	57-103	4	20	
Fluorene	ug/L	2	1.6	1.5	82	75	38-85	9	28	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.7	1.7	83	84	40-111	1	22	
Naphthalene	ug/L	2	1.6	1.4	82	72	39-82	14	28	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: KP VENTURES  
Pace Project No.: 40152390

LABORATORY CONTROL SAMPLE & LCSD:		1532293		1532294							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
Phenanthrene	ug/L	2	1.8	1.8	91	88	46-96	3	25		
Pyrene	ug/L	2	2.1	2.2	103	108	57-110	4	20		
2-Fluorobiphenyl (S)	%				83	73	35-84				
Terphenyl-d14 (S)	%				92	87	10-129				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.







## QUALIFIERS

Project: KP VENTURES

Pace Project No.: 40152390

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: 260190

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

1q There was no chance to reextract the sample within the samples hold time.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

S0 Surrogate recovery outside laboratory control limits.

S4 Surrogate recovery not evaluated against control limits due to sample dilution.

S7 Surrogate recovery outside control limits (not confirmed by re-analysis).

W Non-detect results are reported on a wet weight basis.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KP VENTURES

Pace Project No.: 40152390

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40152390001	B-1, 2'	TPH GRO/PVOC WI ext.	260097	WI MOD GRO	260154
40152390002	B-2, 3'	TPH GRO/PVOC WI ext.	260097	WI MOD GRO	260154
40152390004	B-4, 7'	TPH GRO/PVOC WI ext.	260097	WI MOD GRO	260154
40152390005	B-5,7'	TPH GRO/PVOC WI ext.	260097	WI MOD GRO	260154
40152390007	B-6,5'	TPH GRO/PVOC WI ext.	260097	WI MOD GRO	260154
40152390009	B-7,7'	TPH GRO/PVOC WI ext.	260097	WI MOD GRO	260154
40152390011	B-8 7'	TPH GRO/PVOC WI ext.	260097	WI MOD GRO	260154
40152390010	B-8	WI MOD GRO	260096		
40152390001	B-1, 2'	EPA 3546	260499	EPA 8270 by SIM	260564
40152390002	B-2, 3'	EPA 3546	260499	EPA 8270 by SIM	260564
40152390003	B-3, 3 1/2	EPA 3546	260499	EPA 8270 by SIM	260564
40152390012	B-9, 4'	EPA 3546	260499	EPA 8270 by SIM	260564
40152390006	B-5	EPA 3510	260101	EPA 8270 by HVI	260190
40152390010	B-8	EPA 3510	260101	EPA 8270 by HVI	260190
40152390003	B-3, 3 1/2	EPA 5035/5030B	260168	EPA 8260	260171
40152390008	B-7,4'	EPA 5035/5030B	260168	EPA 8260	260171
40152390012	B-9, 4'	EPA 5035/5030B	260168	EPA 8260	260171
40152390006	B-5	EPA 8260	260080		
40152390001	B-1, 2'	ASTM D2974-87	261040		
40152390002	B-2, 3'	ASTM D2974-87	261040		
40152390003	B-3, 3 1/2	ASTM D2974-87	261040		
40152390004	B-4, 7'	ASTM D2974-87	261040		
40152390005	B-5,7'	ASTM D2974-87	261016		
40152390007	B-6,5'	ASTM D2974-87	261016		
40152390008	B-7,4'	ASTM D2974-87	261016		
40152390009	B-7,7'	ASTM D2974-87	261016		
40152390011	B-8 7'	ASTM D2974-87	261016		
40152390012	B-9, 4'	ASTM D2974-87	261016		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

(Please Print Clearly)



www.faceanals.com

# CHAIN OF CUSTODY

A=Name B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

UPPER MIDWEST REGION  
 MN: 612-607-1700 WI: 920-469-2436

40152390

Company Name: Seymour  
 Branch/Location:  
 Project Contact: Robyn Swann  
 Phone:  
 Project Number: KP Venture  
 Project Name:  
 Project State: Massachusetts  
 Sampled By (Print): Robyn Swann  
 Sampled By (Sign): Robyn Swann  
 PO #:

FILTERED? (YES/NO)  
 PRESERVATION (CODE)\*

Data Package Options (billable)  
 EPA Level III  
 EPA Level IV  
 On your sample (billable)  
 NOT needed on your sample

Matrix Codes  
 A = Air B = Biotin C = Charcoal D = Oil E = Soil  
 F = Sludge G = Water H = Drinking Water I = Ground Water  
 J = Surface Water K = Waste Water L = Wipe

PAGE LAB #	CLIENT FIELD ID	DATE	COLLECTION TIME	MATRIX
001	B-1, 2	6/22	0845	S
002	B-2, 3		0855	S
003	B-3, 3 1/2		0900	S
004	B-4, 7		0920	S
005	B-5, 7		0930	S
006	B-5		0945	GW
007	B-6, 5		0955	S
008	B-7, 4		1015	S
009	B-7, 7		1020	S
010	B-8, 7		1100	
011	B-8, 7		1045	
012	B-9, 4		1120	GW
			1130	S

Analyses Requested	V/I/N			
	Pick Letter	F	A	B
PVOC		X		
PAH		X		
VOC			X	
PVOC-Naph				X

Quote #:  
 Mail To Contact: Robyn Swann  
 Mail To Company: Seymour Env  
 Mail To Address: 2531 Durison Road McFarland, WI 53558  
 Invoice To Contact:  
 Invoice To Company:  
 Invoice To Address:  
 Invoice To Phone:  
 CLIENT COMMENTS: dirty  
 LAB COMMENTS (Lab Use Only): 1-40mL F 1-40mL B 1-40mL A 1-40mL B 1-100mL A 1-40mL B 1-100mL A 1-40mL B 1-100mL A

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)  
 Date Needed:  
 Transmit Prelim Rush Results By (complete what you want):  
 Email #1:  
 Email #2:  
 Telephone:  
 Fax:

Relinquished By: Robyn Swann Date/Time: 6/27/17  
 Relinquished By: ES Logistics Date/Time: 6/27/17  
 Relinquished By: Date/Time:  
 Relinquished By: Date/Time:

Received By: Robyn Swann Date/Time: 6/27/17  
 Received By: Robyn Swann Date/Time: 6/27/17  
 Received By: Date/Time:  
 Received By: Date/Time:

Receipt Temp = 20 °C  
 Sample Receipt pH  
 Cooler Custody Present / Not Present  
 Intact / Not Intact